



**COMMENT RESPONSE DOCUMENT (CRD)
TO NOTICE OF PROPOSED AMENDMENT (NPA) 16-2006**

**for a Commission Regulation amending Commission Regulation (EC) No 1702/2003,
laying down implementing rules for the airworthiness and environmental
certification of aircraft and related products, parts and appliances, as well as for the
certification of design and production organisations**

And

**for amending the Executive Director Decision No. 2003/1/RM of 17 October 2003
on acceptable means of compliance and guidance material for the airworthiness and
environmental certification of aircraft and related products, parts and appliances, as
well as for the certification of design and production organisations ("AMC and GM to
Part 21")**

"SUBPART J DOA"

Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 16/2006, dated 16 October 2006, was to adapt Commission Regulation (EC) No 1702/2003¹ of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations, and to propose an amendment to Decision No. 2003/1/RM² of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21")

II. Consultation

2. The draft Executive Director Decision amending Decision No 2003/1/RM and Opinion for amending Commission Regulation 1702/2003 was published on the web site (www.easa.europa.eu) on 12 October 2006.

By the closing date of 12 January 2007, the European Aviation Safety Agency (the Agency) had received 158 comments from 35 National Aviation Authorities, professional organisations and private companies.

III. Publication of the CRD

3. All comments received have been acknowledged and incorporated into this Comment Response Document (CRD) with the responses of the Agency.
4. In responding to comments, the following standard terminology is used:
 - **Accepted** – The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
 - **Partially Accepted** – Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
 - **Noted** – The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
 - **Not Accepted** – The comment or proposed amendment is not shared by the Agency.
5. Due to the controversial nature of this task, the Executive Director of the Agency has extended the reaction period from the normal two months. The Agency's Decision will therefore be issued at least *three months* after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.

¹ OJ L 243, 27.9.2003, p.6. Regulation as last amended by Commission Regulation (EC) No 287/2008 of 28 March 2008 (OJ L 87, 29.3.2008, p.3).

² Decision No 2003/01/RM of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21") as last amended by ED Decision 2007/012/R of 22 November 2007.

6. Such reactions should be received by the Agency not later than **16 December 2008** and should be sent to CRD@easa.europa.eu.

IV. Summary of main issues raised by commenters and EASA's responses

7. Comments received on NPA 16/2006 indicate that opinion is split between Industry, who in the main support the NPA, and NAAs and experts involved in EASA certification activities, who are against. As a consequence, considerable internal debate and consultation has been undertaken to try to reconcile these opposing positions and this has led to considerable delay in publishing this CRD.
8. A summary of the main issues raised by commenters together with the Agency's responses are given in this section. Individual comments received and the Agency's responses are provided in Section IX of this document.
 - a) Perception that the proposed approach will result in a reduction of the Agency experts' involvement in certification processes, which may lead to a reduction in safety.

These proposals do not have to lead to less involvement of Agency experts. If the scope of the applicant's compliance demonstration is outside the terms of its approval or the Agency identifies that safety risks may be present, then Agency involvement would be mandated. The intent is to determine at the start of a project or as early as possible thereafter, the level of Agency involvement in verifying compliance documents, so as to create a clear privilege for the DOA and better legal certainty for the applicant.

The scope of these proposals is related to the Agency's involvement in compliance demonstration activities performed by the applicant. In all other certification related activities (e.g. design familiarisation, determination of certification basis, establishment of the certification programme, etc.) the Agency will always need to be involved.

A new 21A.38 is developed that defines a legal obligation on the Agency to verify compliance demonstration when the related activity falls outside the scope of a DOA or when the Agency determines through risk assessment methodologies that a significant safety or environmental protection issue may be present. A mechanism is also provided to allow a change in Agency involvement at any time during the certification programme when conditions arise that may impact on safety or compliance with environmental protection requirements.

In targeting future Agency involvement in product compliance verification to high risk areas and those outside of the DOA's terms of approval, it is recognised that a tightening of DOA oversight and procedures would be necessary to maintain the level of safety. Any reduction in the current level of Agency involvement in product compliance verification is therefore linked to enhanced Agency oversight of the applicant and the obtaining and maintaining of precise privileges. Such enhancements would include a more detailed assessment of technical knowledge, capabilities and experience in applying the rules, and would be supported by in-depth product audits. (See Section VI. Proposed Future Changes to DOA Requirements).

- b) Limited confidence put in the assessment leading to a DOA, due to limited involvement of certification experts.

NPA 16/2006 places reliance on the level of Agency confidence in the applicant and in key personnel when determining its involvement in product compliance

verification. On reflection, this approach was legally flawed as the granting of a DOA and privileges by the Agency already signifies that an acceptable level of confidence has been established with the holder organisation. A change in concept is proposed to remove this reliance.

Enhanced DOA surveillance standards and procedures will therefore be developed in parallel to this proposal and include greater technical content and involvement of the Agency's certification experts in both the initial DOA approval and continuing surveillance. In addition, in-service experience of the DOA's products, including accident and incident reports as well as reports from environmental monitoring, will form part of the DOA assessment and integrated into the surveillance process to identify what kind of technical activity should be sampled.

The level and intensity of DOA surveillance could be performance based, so that where a DOA holder has proven to perform well the surveillance can be reduced and vice versa.

- c) Concept of confidence given to DOA based on experience will limit the Agency involvement; this is considered as detrimental to the Agency, as its involvement is seen as beneficial to acquire a good knowledge of products, to maintain technical competence, to ensure standardisation between projects and credibility in front of validating authorities.

See a) and b) above. In addition, alternative ways to ensure the necessary Agency expertise and credibility can be found, not only through involvement in product related activities, but also through training, participation in rulemaking and related activities and assessments at organisation level.

- d) Participation in product certification activities is considered to have greater safety benefits than auditing the organisation.

The Agency accepts that direct involvement of Agency experts in product certification activities does lead to benefits and it remains the Agency's intention to continue to be involved in these activities where the greatest safety or environmental risks are perceived to exist. However, it is also true that in the past issues identified during product certification may not have led to changes at an organisation level, resulting in the same issues reoccurring on future projects. Furthermore, many of the issues identified can be traced to misinterpretation or lack of experience in applying the rules, and this may be better addressed through greater organisation oversight. It is therefore evident that safety and environmental protection can best be served by a combination of product and organisation oversight.

The large number of on-going certification projects in relation to the available resources has already adversely impacted the level of Agency involvement. The new rules will allow the Agency to restructure its internal procedures to provide for a more safety focused approach that provides added value to the certification process. By allocating clear responsibilities to a DOA, enhancing DOA standards and expanding the involvement of Agency experts, and targeting DOA surveillance by using all available safety indicators as well as results from environmental monitoring, the reliability of DOA compliance statements can be improved.

Other major aviation authorities (e.g. FAA and TCCA) are following the Agency's lead and are already well advanced in developing similar approaches using organisation oversight as a key element in their future regulatory systems.

- e) *Fear of wasting time in discussing level of involvement, rather to discuss technical issues, and be prevented to perform some activities.*

The process will tailor Agency level of involvement based on identified safety risks. Ultimately, it is the Agency that must issue the type-certificate in accordance with 21A.21, in particular paragraph (c)3, and must be satisfied that an acceptable level of safety has been demonstrated. It is expected that the DOA holder will accept Agency involvement in certain areas if the process to define those areas is clear and predictable.

V. Summary of changes made to NPA 16/2006

9. As a result of the comments received and further discussions of the concept within the Agency, some changes to the concept outlined in NPA 16/2006 are now proposed. These changes are summarised below, with the proposed changed text identified in Appendix 1.
- a) The certification programme is no longer required to be approved by the Agency and the link between 21A.20 and 21A.38 is removed. This clarifies that the responsibility for developing and maintaining the certification programme is firmly vested with the applicant. Agency procedures define how any disagreement with the certification programme proposed by the applicant is notified.
 - b) NPA 16/2006 places reliance on the level of Agency confidence in the applicant to determine its level of involvement in product compliance verification and to key personnel contributing to the level of confidence. As the concept based on these factors has been determined to be legally flawed, they are removed in the changed concept.
 - c) There is a change in emphasis away from defining tasks with "no Agency involvement", which could be misleading, to creating a specific obligation on the Agency to verify compliance documents submitted by the applicant, based on defined criteria. The involvement of the Agency in product certification programmes (after familiarisation and after the TC basis and environmental protection requirements are developed in accordance with Part 21A.17 and 21A.18) is now defined in a new Paragraph 21A.38.
 - d) The possibility to modify in a controlled manner the extent of Agency verification during the certification programme is included in paragraph 21A.38. AMC material is added to provide guidance on conditions that may necessitate such changes.
 - e) 21A.257 is revised to provide for Agency verification of compliance findings in product related compliance demonstration activities as part of a DOA audit. This will enable the Agency to determine the technical competence and continued competence of that organisation. (See proposed DOA changes in Section VI).
 - f) 21A.263 is revised and AMC added to clarify that DOA privilege granted under 21A.263(b) are project dependent. The Agency, in accordance with 21A.38, will notify the applicant, for each certification project, the extent to which the privileges granted under 21A.263(b) apply.

VI. Proposed Future Changes to DOA oversight

10. In focusing future Agency involvement in product compliance verification to high risk areas, it is recognised that greater potential may then exist for problems in other areas to go undetected, and that greater reliance must be placed on the DOA system in order to maintain a high level of safety and environmental protection.

11. In parallel with the development of NPA 16/2006, it is the Agency's intention to enhanced DOA surveillance standards and procedures and to link implementation of these enhancements and the issue of precise privileges, with any reduction in Agency involvement in compliance verification at product level. The Agency will develop its internal procedures to reflect these changes.
12. Changes envisaged to the DOA system include the following:
 - a) DOA audits will include greater technical content and involvement of the Agency's certification experts in both the initial DOA approval and continuing surveillance.
 - b) The terms of approval of the DOA will contain precise privileges to allow compliance determinations made by the applicant to be accepted with the agency compliance verifications as defined in paragraph 21A.38. These privileges will be defined after in-depth review of design processes taking into account the experience of the DOA and its technical competence. The combination of the terms of approvals (including the precise privileges) and of paragraph 21A.38 will define the Agency's involvement in product compliance demonstration.
 - c) The privileges will evolve with time based on indicators derived from organisational and product experience, including any events related to continuing airworthiness or environmental protection.
 - d) In order to continuously ensure that DOA holders maintain high standards over time, audits would cover organisational issues as well as in-depth technical reviews of some designs developed within the DOA declared scope of competence.
 - e) Entry into force:
For update of existing DOA and new DOA, the entry into force date of the new requirements would be the date of adoption of revised Part-21. For existing DOA, the entry into force of the new requirements would be 3 years after adoption.

VII. Review Group's Comments/Recommendations

13. As part of the development of the revised concept and in compliance with Article 7 of the Rulemaking procedure³, the Agency set up a review group consisting of the original drafting group, plus 2 additional persons, to review comments received and the changes to the concept proposed by the Agency. The review group consisted of industry airworthiness specialists, representatives of national authorities and supported by Agency rulemaking, certification and standardisation staff.
14. In response, the Review group had the following comments:
 - a) The Agency's proposals were not supported.
 - b) The Agency's proposals were considered to go much further than the original objective of clarifying the link between 21A.257(b) and 21A.263(b), and could be considered as being outside of the group's ToR.
 - c) Legal certainty regarding the Agency's level of involvement in on-going projects may not be achieved by restricting Agency verification of compliance findings at

³ Management Board decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB 08-2007, 13.6.2007.

product level and replacing it by a change to the DOA concept which may focus on technical investigations during DOA surveillance activities.

- d) The new 21A.38: "Verification by the Agency", does not reflect existing levels of Agency verification of compliance findings. Industry had not intended that the level of Agency involvement in product certification should be unduly restricted. The concept should better ensure, based on defined guidelines, that a level of Agency verification of compliance findings is agreed as early as practicable in the certification process and maintained, pending any unforeseen issues arising.
- e) 21A.38 represents for the Agency a minimum level of involvement. Industry members of the group considered that by stipulating this minimum level in hard law, pressure may soon be exerted to limit Agency verification of compliance findings to this minimum level. This reduced level of Agency involvement was seen by industry as having an adverse safety impact and may result in increased validation burden.

15. Review Group's recommendations:

- f) The CRD should not be published as proposed by the Agency.
- g) A clear distinction should be made between the limited objectives of this task (clarification of the link between 21A.257(b) and 21A.263(b)), and any proposed future development of the DOA system. In the later case, any proposals should be subject to full consultation with stakeholders.
- h) Based upon the published NPA, comments received on the NPA, and elements from the Agency's proposal that are consistent with the Group ToR's (e.g. new paragraph 21A.38), a revised proposal is offered to the Agency for its consideration.
- i) If the Review Group's proposals are accepted by the Agency, a further meeting of the Review Group should be held with the intent of further refining the text of Part-21 and to review and amend responses to comments, which were already outdated and had not been kept up-to-date as the concept had developed.
- j) If the Agency intends to proceed with its proposals, a new NPA should be developed to reflect the significant nature of the changes proposed.
- k) If the Agency continues with its proposals, it should be clearly written in the CRD that the review group did not support these proposals and that alternate wording had been proposed.

VIII. Agency's response to review group's comments/recommendations

16. The Agency does not share the review group's opinion that the concept will overly restrict the Agency's verification of compliance findings at product level. Furthermore the Agency believes that redistributing available resources to strengthen DOA oversight and enhance procedures through greater technical oversight and in-depth certification reviews will ensure a high level of safety and environmental protection. Advice the Agency has received from other sources tends to support the Agency's position.

Reactions from stakeholders are particularly welcome on this point.

17. In response to the Review Group's comments/recommendations, the Agency has the following responses:
- a) Noted

- b) Not Accepted. The task objective, as defined in the ToR, was primarily aimed at providing greater legal certainty to applicants that compliance documents submitted under the privileges of a DOA would be accepted by the Agency without further verification. The objective is obtained in this proposal by removing 21A.257(b) and replacing it with a legal obligation on the Agency (21A.38) to verify compliance during project certification, based on defined criteria. 21A.263 is amended to provide a true privilege to DOA holders so that compliance documents submitted as part of a project certification activity are accepted without Agency verification when outside of any area identified in 21A.38. However, in proposing such a change, the Agency believes that such legal certainty can only be established if linked with a change to the DOA system which enhances DOA surveillance standards and procedures and establishes more precise privileges.
- c) Not Accepted. DOA related technical audits will be performed to support application and maintenance of a DOA. They are intended as an oversight activity without direct Agency involvement in the performing of tests.
- d) Noted. The level of Agency involvement at product level is defined in 21A.38 and will be notified by the Agency on a case-by-case basis as a function of the precise privileges granted to the DOA under 21A.263 (following re-assessment to the enhanced DOA standards), and the identified safety risks. The concept still provides for the level of Agency compliance verification to be agreed at an early stage in the project and for the level of Agency involvement to be adjusted throughout the certification programme, when safety issues arise.
- e) Noted. Safety levels will be maintained by enhancing DOA oversight and procedures and by limiting DOA privileges to areas where DOA standards have been demonstrated using these enhancements.

As other major aviation authorities (e.g. FAA and TCCA) are following the Agency's lead and are already well advanced in developing similar approaches using organisation oversight as a key element in their future regulatory systems, these changes are not expected to create additional validation burdens.
- f) Noted. The Agency accepts and has incorporated many of the detailed comments proposed by the review group into the revised text contained in Appendix 1. However, the Agency remains of the opinion that its revised concept provides an acceptable safety focussed proposal, which will ensure that available Agency resources are put to their most effective use.
- g) Not Accepted. The change in concept and enhancement of the DOA system are inextricably linked to the task objectives.
- h) Noted. The Agency accepts and has incorporated many of the detailed changes proposed by the review group into the revised text contained in Appendix 1.
- i) Not Applicable.
- j) Not Accepted. While some changes to the text of NPA 16/2006 have been incorporated, these are considered to be of limited scope and are not significant to the extent that a new NPA is justified. Changes to Agency internal DOA procedures are a matter for the Agency and will be notified separately.
- k) Accepted.

IX. CRD table of comments and responses

Comment # /provider	Para	Comment/Justification	Response
1. CAA Poland	21A.263(c)(4)	to approve minor revisions to the aircraft flight manual, as a result of minor change approval , containing the following statement..... etc,etc. <i>(rest of the text without any changes)</i> Added phrase (highlighted with grey shading) clarifies when the minor revision to the flight manual is applicable. To avoid any misunderstandings it seems necessary to show direct connection between minor revision to the flight manual and minor change approval within scope of DOA approval.	Not Accepted This proposed extension in DOA privileges allows the DOA holder to approve certain minor changes to the FM that are stand-alone. (See new GM 21A.263(c) (4).
2. MTU	21A.263	Develop an equivalent form to the FAA Form 8110-3 and the completion and issue of this form to the privileges. <u>JUSTIFICATION:</u> The inclusion of this form will introduce a standard means of showing approval of data. It will remove the need for each individual Design Organization to develop its own form. It will standardize this throughout EASA. It will find more acceptance from other NAAs.	Not Accepted The issue was raised during the review group, where there was little support from industry members, who considered that such a move may impact industry unduly.
3. MTU	21A.263	(c) 3. to issue information or instructions containing the following statement: 'The technical content of this document is approved under the authority of DOA nr no . [EASA]. 21J. [xyz].' (c) 4. to approve documentary changes minor revisions to the aircraft flight manual, and issue such revisions changes containing the following statement: Approved under the authority of DOA nr no . [EASA].21J.[xyz].' <u>JUSTIFICATION:</u> The English abbreviation for 'number' should be used in the English version of the regulation. The regulation currently uses the German abbreviation, e.g. no. instead of nr.	Accepted
4. CAA Finland	GM No. 1 to 21A.239(a)	Draft decision "AMC & GM to Part 21" GM No. 1 to 21A.239(a) Design assurance system page 27 of NPA No 16-2006 Text reads at bottom of page: Figure 1 – Relationships Between Design; Design Assurance And Type Investigation Text should read: Figure 1 – Relationships Between Design; Design Assurance And Certification Programme <u>JUSTIFICATION:</u> Consistent wording	Not Accepted Type investigation is still defined in paragraph 2.3 of the GM No. 1 to 21A.239(a), and is correct in the context of the figure 1.
5. Airbus	21A.20(b)	The applicant shall propose a certification plan, which the Agency shall agree, detailing: 1 A description of the project; and 2 The means of compliance; and 3 The list of compliance demonstration activities and documents, including the schedule; and 4 The involvement of the Agency in the compliance demonstration activities, taking into account the	

Comment # /provider	Para	Comment/Justification	Response
		<p>DOA privileges granted under 21A.263(b), if applicable</p> <p>3. <u>JUSTIFICATION:</u></p> <ul style="list-style-type: none"> - The word 'approve' is proposed to be replaced by 'agree'. This is inline with the current way of working, whereby the EASA specialists agree on certification plans during meetings or by e-mail correspondence. If an approval would be required, this would be in the form of a formal letter with signature, which is normally not done by EASA-specialists and which would lead to delay's. - The word 'certification programme' is proposed to be replaced by 'certification plan'. To be in line with former JAA procedures/guidance (JC/VP, TGM's), which used the terminology 'plan', Airbus had changed all internal procures/templates/training material. Therefore it is proposed to stick to the word 'plan'. - It is proposed that the certification plan should include 'a description of the project'. Although this has been written in the proposed AMC & GM, it is seen as an important aspect of the plan and therefore to be put in the rule. It is needed for the Agency (or any other reader) to understand the plan. - It is proposed to replace 'compliance documentation structure' by 'list of compliance demonstration activities and documents, including the schedule'. The 'documentation structure' may be an important aspect under the DOA, but irrelevant to be put in each certification plan. What is important is list and the schedule of all the compliance demonstration activities and documents to ensure for the applicant that all activities will be performed in time and for the Agency to schedule their work, e.g. plan for witnessing tests. 	<p>Partially Accepted It is recognised that the requirement for Agency approval creates a new burden that has no root in the Basic Regulation. Responsibility should be retained by the applicant and not shared with the Agency. Agency internal procedures will describe how the CP is reviewed and disagreements notified to the applicant. AMC 21A.20(b) is amended.</p> <p>Not Accepted The phrase "Certification Programme" is retained as it is considered to better reflect the content of the task, its on-going nature, and highlight the different from previous JAA procedures. The terminology is also consistent with EASA published product certification procedures (MB Decision 07/2004)</p> <p>Partially Accepted The detailed content of the certification programme has been moved to AMC.</p> <p>Partially Accepted The detailed content of the certification programme has been moved to AMC.</p>
6. Airbus	21A.20(d)	<p>(c) Any changes to the certification plan shall be agreed with the Agency.</p> <p><u>JUSTIFICATION:</u> The current proposed paragraph (d) is very long and uses wording (e.g. whatever additional information), which seem not to be legally correct. With the above proposed new paragraph it is clear that any changes need to be rediscussed and agreed by the Agency, whether it is a evolution of the design, a changed MOC, a changed Agency involvement, etc. Also it is more logical to include this paragraph just after (b).</p>	<p>Not Accepted The EASA internal procedures will describe how the certification programme will be reviewed and disagreements notified to the applicant. AMC 21A.20(b) has been consequently amended.</p>
7. Jean Pierre Sarrato	Explanatory Note Part V, Chapter 2,	In Option 4, replace "predetermined on the basis of the competence and experience demonstrated by the applicant" with "predetermined on the basis of the	<p>Partially Accepted In fact both are correct. Safety oversight by the Agency can only</p>

Comment # /provider	Para	Comment/Justification	Response
	Paragraph a.	<p>need for Agency exposure to the product, of the identified areas in which interpretation of requirements by the applicant and by the Agency may differ, and of the technical particularities of the product”</p> <p><u>JUSTIFICATION:</u> In current best working practices with major DOA holders, particularly for Certification Flight and Simulator Tests, involvement of the Authority has not been based on the competence of the applicant, which is recognized.</p> <p>In the Flight, Performance and Systems Flight Testing areas, determination of Authority involvement has in particular been based on:</p> <ul style="list-style-type: none"> - the need for Authority exposure to the product in order to achieve an acceptable level of technical credibility, particularly in front of foreign authorities - the need for exposure to the product in order to assess the need for new requirements or new interpretations linked to specificities of the design the safety impact of which may not have been adequately anticipated - the need for involvement in compliance demonstration in order to be able to assess and confidently approve limitations, procedures or performance information included in Aircraft Flight Manuals - the need for involvement in compliance demonstration with qualitative airworthiness requirements in order to standardize their interpretation between applicants (this applies particularly to handling qualities and achievability of proposed procedures by crews of average skill) - the need for involvement in compliance demonstration with quantitative requirements in order to continuously standardize compliance methods between applicants 	<p>be re-focussed on those areas deemed to be of higher risk (e.g. new or novel features), if confidence has been established that the applicant’s compliance statements and supporting documentation in other areas are acceptable. Historically, this has not always been the case.</p> <p>Therefore, the Agency intends to introduce in parallel a strengthening of the DOA system and associated privileges, and link compliance with these DOA enhancements with any reduction in Agency verification of compliance findings at product level.</p>
8. Jean Pierre Sarrato	Explanatory Note Part V, Chapter 4, Paragraph a, i	<p>Replace in Option 4 “No safety impact” with “A negative safety impact would arise if the direct involvement of the Agency is significantly reduced”.</p> <p><u>JUSTIFICATION:</u> In current working practices with major DOA holders, involvement of the Authority already takes into account DOA privileges.</p> <p>Further reduction in Authority involvement, particularly if it is frozen at an early stage, would result in a reduction in safety:</p> <ul style="list-style-type: none"> - a satisfactory uniform level of compliance would no longer be ensured among manufacturers - interference of financial or program delay considerations with design decisions affecting safety may jeopardize the current good certification practices without the Authority being aware 	<p>Not Accepted</p> <p>The intent is not to reduce the Agency’s involvement but to re-focus existing resources to areas deemed to be a greater risk to safety.</p>
9. Jean Pierre Sarrato	Explanatory Note Part V, Chapter 4, Paragraph a. i	<p>For Flight, Performance and Systems Flight Tests, it is not understood how [the approved certification programme] “will enable the Agency to focus limited resources on areas where there are perceived weaknesses [...]”. Most weaknesses of a given design are actually revealed through certification flight and simulator tests. Authority participation in or</p>	<p>Noted</p> <p>While it is accepted that ground and flight testing can reveal problems, it is not necessarily the case that Agency involvement is necessary or desirable in resolving such issues.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>witnessing of such tests currently allows Authority exposure to such weaknesses and appropriate decisions to be taken. Weakness areas can not be predetermined prior to testing.</p> <p>JUSTIFICATION: Determination of weakness areas for a particular new project requires comprehensive direct exposure to the project through involvement in certification flight and simulator testing. A predetermined low level of involvement based on previous projects, or on preconceived views, would not be technically relevant, leading to a lack of involvement of the Authority in the most safety critical areas. This would lead to inefficient or even counterproductive Agency activity. The lack of independent oversight on such critical areas would be detrimental to Safety.</p>	<p>A new 21A.38 and AMC 21A.38 have been developed to identify where verification by the Agency will be performed.</p>
10. Jean Pierre Sarrato	Explanatory Note Part V, Chapter 5, Paragraph a.	<p>For Option 4, it is not understood how "Safety will be assured by initially basing the approved certification programme on the level of the applicant's expertise and Agency's confidence in their ability to design and certificate a product".</p> <p>Indeed, whatever the level of expertise, an applicant will not be able to assure good standardization of interpretations between manufacturers, due to the confidentiality of detailed design information. In case of reduced agency involvement, numerous inconsistencies in the application of airworthiness requirements would necessarily result, along with a loss of expertise of Agency personnel.</p> <p>Option 2 appears much more efficient in assuring a satisfactory uniform level of safety.</p> <p>JUSTIFICATION: Particularly in the Flight and Performance areas, certification experience has shown that a lack of involvement of the Authority quickly resulted in divergent interpretations of requirements or compliance methods. It is believed that it is the role of the Agency to set and standardize interpretations and compliance methods among manufacturers. For this purpose, it seems necessary to maintain the current level of Authority involvement in compliance demonstration activities.</p>	<p>Noted As part of the implementation of NPA 16/2006, the Agency will in parallel enhance existing DOA procedures to include a greater technical content. Any reduction of Agency verification of compliance findings at product level will therefore be compensated for by an increased involvement at organisation level. The intent is that design practices and the interpretation of airworthiness requirements will form part of the organisational assessment and precede any project application. DOA privileges will only be granted for the scope of activities assessed.</p>
11. Didier Poisson	Para 5	<p>Comment: This text which has been developed by a dedicated EASA rulemaking group has apparently not been sufficiently discussed with experienced European certification specialists and PCMs.</p> <p>JUSTIFICATION: This NPA is well in contradiction with recent experiences in certification as experienced by certification specialists and PCMs. It is also in contradiction with the need for the EASA to be trusted as a efficient Certification Authority by the non European AAs.</p>	<p>Partially Accepted The NPA was developed by a dedicated rulemaking group which drew on expertise from industry, the Agency (including a PCM) and NAAs.</p> <p>However, it is agreed that the concepts developed could be misinterpreted and requires further explanation. The introduction to this CRD explains in more depth the Agency's intentions.</p>
12. Didier Poisson	A. IV Task 1	<p>The Task 1 paragraph does not mention that this NPA is also promoting a significant reduction of involvement of the Agency in the compliance demonstration activity. This should clearly appear in this paragraph as in all other affected.</p>	<p>Not Accepted The new rules do not have to lead to less involvement of EASA experts in product certification.</p> <p>While the intent of these proposals is to focus more on</p>

Comment # /provider	Para	Comment/Justification	Response
		<p><u>JUSTIFICATION:</u> This NPA is proposing to reduce the Agency involvement in the compliance demonstration to a level which is even lower than the involvement the Agency has in validation projects with well known Airworthiness Authorities and on a mutual trust principle. For these validations, this involvement is limited to some retained items (regulation differences, novel features, new regulation or means of compliance, item of specific interest) and as it is not sufficient to have a good overlook to the product, the Agency team is in addition exposed to it through a significant familiarization activity. This limited involvement is only accepted by AAs based on the fact that the Certification Authority of this product is deeply involved in the compliance demonstration and that there are joint procedures. The dramatic reduction in the involvement of the Agency in the compliance demonstration for a certification exercise which is introduced in this NPA have to be clearly written in the NPA in all relevant paragraphs.</p>	DOA surveillance, supported as necessary by certification in depth review of designs, any reduction in product related involvement would only be considered following the granting of DOA privileges within the scope of those activities.
13. Didier Poisson	A.V. 4. a. ii	<p>To replace “no safety impact” by “From what has been seen in the past, a negative safety impact would arise from the limited involvement made by the Agency”.</p> <p><u>JUSTIFICATION:</u> As we have seen in recent certification exercises, the issues found by the Agency team members during the compliance demonstration review and which end up to aircraft or/and limitation modifications, were in majority related to known areas and known regulation items. The fact that the industrial was well matured and had a DOA from a long time did not influence this result. It will be even easier for a matured aircraft designer to guide the certification Authority toward areas of no concern and to keep in the shadow areas where the compliance demonstration is weak.</p>	Not Accepted (See response to Comment #8)
14. Didier Poisson	A. V. 4. a. ii	<p>To add that : “there is a potential for an increase involvement of validating Authorities which could imbalance the savings made with the certification Authority”.</p> <p><u>JUSTIFICATION:</u> As validating Authorities are adjusting their involvement and delegation to the confidence they have in the certification Authority work, if the Agency is reducing its involvement, there is a high potential for the validating Authorities, and the FAA in first place, to be more deeply involved in the means of compliance demonstration and to reduce the level of delegation to the EASA team. This would increase the burden (time and cost) on the industry at every validation exercise.</p>	<p>Not Accepted Through bi-lateral agreements, the FAA and other Authorities currently accept the EASA certification procedures, which already include some reliance being placed on the DOA system.</p> <p>Currently, compliance statements submitted by a DOA holder operating within their terms of approval, may or may not be verified by the Agency. NPA 16/2006 simply aims to formalise this existing process.</p> <p>No additional involvement of validating authorities is therefore anticipated.</p>
15. Didier Poisson	Proposal 3 21A.33(d)	<p>Former (d) paragraph has been deleted and should be reinserted.</p> <p><u>JUSTIFICATION:</u> If the above paragraph is deleted, the Agency’s involvement will be only dependant of the applicant</p>	<p>Not Accepted Deletion of 21A.33(d) is fundamental to the concept of NPA 16/2006.</p> <p>However, a new paragraph</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>will, analysis and reporting level. As this kind of additional involvement will add cost and delays to the programme, the DOA holder will always put safety in balance with the other constraints.</p> <p>If the Agency involvement is under the applicant decision and information, the saliency of the issues will be more dependant of economics and agenda constraints than on the safety level to reach. The Agency shall be able to decide any inspection on its own.</p>	<p>21A.38 is now added to stipulate when verification by the Agency is necessary. Furthermore, 21A.257 allows the Agency to make any investigation, including witnessing project related tests, to establish compliance and continued compliance with the requirements for DOA.</p>
16. Didier Poisson	Proposal 12 AMC 21A.20(b) 1.1.3	<p>This 1.1.3. paragraph exclude from the beginning the Agency to any familiarization to the product. The need for a familiarization is part of the certification process for every discipline and should be clearly written.</p> <p><u>JUSTIFICATION:</u> Before focusing on knew and novel items of certification and design, the EASA team needs to be familiar with the product. This paragraph excludes this possibility and it is a real setback. The familiarization phase is an important step in the process to gain confidence in the product and in the applicant for the programme, and to reach the necessary level to start evaluation of novel items. This is part of a built up principle which is already difficult to achieve correctly due to time and financial pressure and which would be forbidden if this text is not amended. It has to be noted that this familiarization is already part of the validation procedures.</p>	<p>Not Accepted 21A.20(b) and AMC relate to the Agency's involvement in compliance demonstration activities. Prior to this, a technical familiarisation phase will take place with the full involvement of the Agency, including the notification of type certification basis and Agency review and notification of disagreements with the certification programme.</p>
17. Didier Poisson	Proposal 14 GM 21A.20(d) 2.	<p>Reword the paragraph 2 with : "Following submission of information, the Agency may require a change in its planned involvement. In such case, the relevant elements of the certification programme should be updated and approved by the Agency."</p> <p><u>JUSTIFICATION:</u> It is the applicant responsibility to update the certification programme. However, at any time the Agency may require a modification and in particular about its own involvement.</p>	<p>Partially accepted. GM 21A.20(d) has been deleted and verification by the Agency is now addressed under new paragraph 21A.38.</p> <p>Responsibility for updating the certification programme is clarified in new GM 21A.20(b).</p>
18. Didier Poisson	Proposal 21 AMC 21A.263(b)	<p>Comment : This paragraph 263(b) aims to identify DOA holders with different confidence level. It is not understood how this can be achieved in practice and also in legal term !</p> <p><u>JUSTIFICATION:</u> It is well understood that DOA holders may have different level of competency. It is well identified that a DOA holder which has no flight test department or partial design office is not at the same level as a major aircraft designer.</p> <p>However, this paragraph is highlighting a possibility to quantify the DOA holder on non measurable parameter like "satisfactory experience on similar certification exercises" and "key personnel". Does it mean that the confidence level in a DOA could be nominative or based on a former experience ? In this fast moving business and industrial world, competency level may change very quickly, and it</p>	<p>Accepted The Agency accepts that the proposal contained in the NPA is legally flawed. Granting of a DOA and privileges by the Agency should signify that an acceptable level of confidence has been established with the holder organisation.</p> <p>The revised approach detailed in this CRD places an obligation on the Agency to verify compliance statements when outside of any DOA privileges or in accordance with defined risk based criteria.</p> <p>In parallel with these proposed changes to Part-21, the Agency intends to strengthen DOA procedures by linking privileges</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>would be dangerous to base a level of confidence on these factors. Additionally , it could be challenging to do it in legal term.</p> <p>It would be preferable to set the level of confidence only on the demonstration capability of the DOA holder.</p>	<p>directly to the demonstrated capability, including technical capability, of the DOA.</p>
19. Eurocopter	Item 1	<p>Approval privileges for revision of the technical publications should be extended to avoid EASA time processing with regard to no value added tasks. The production of tech. pub. manuals, which sum up several technical data which have yet been EASA approved, is an editorial work which don't justify further EASA involvement.</p> <p><u>JUSTIFICATION:</u> Provide consistency</p>	<p>Partially Accepted Under the NPA, the privileges of 21A.263(c)(4) are extended to allow minor revisions to the flight manual to be approved under the terms of approval of a DOA holder. The task ToR does not address other technical publications. This may be an area for future rulemaking.</p>
20. Eurocopter	Item 2. Part III Proposal 18	<p>3.1.4 <i>Office of Airworthiness</i></p> <p>Add:</p> <p>...</p> <p>I. Ensuring co-operation in preparing inspection and test programmes needed for demonstration of compliance.</p> <p><u>JUSTIFICATION:</u> Provide consistency</p>	<p>Accepted</p>
21. ASD	General	<p>ASD fully supports the proposed changes contained in draft Opinion and Decision described in NPA 16-2006</p> <p><u>JUSTIFICATION:</u> Adoption of the proposed changes will bring more standardization in certification procedures and acceptance of DOA privileges, to the benefit of both industry and the Agency.</p>	<p>Noted</p>
22. Jean-Pierre Sarrato	Existing 21A.33 paragraph (d)	<p>Replace existing 21A.33 (d) with: (d) The applicant shall allow the Agency to review reports, make inspections, and perform or witness flight and ground tests identified as means of compliance, as necessary for the Agency to be satisfied that compliance with the applicable airworthiness and environmental requirements has been demonstrated. Acceptable Agency involvement shall be approved by the Agency as part of a certification programme (see 21A.20 (b)).</p> <p><u>JUSTIFICATION:</u> Complete deletion of existing 21A.33 (d) would introduce an unacceptable uncertainty regarding whether Agency involvement is determined by the Agency or by the applicant. Such a deletion could be understood as a major weakening of EASA as an airworthiness authority, through loss of independent Agency oversight on compliance demonstrations, leading to the same negative safety impact as Option 3 considered in the Explanatory Note. A major loss of credibility of the Agency in front of the public and in front of foreign authorities may result. The proposed text aims at avoiding such a detrimental ambiguity, that could disrupt current satisfactory working practices and generate major conflicts about the interpretation of amended Part 21.</p>	<p>Not Accepted (See response to Comment #15)</p>

Comment # /provider	Para	Comment/Justification	Response
23. Jean-Pierre Sarrato	Proposed new AMC 21A.20(b) paragraph 1.1.3	<p>Replace "For each means of compliance, the criteria to be used to identify activities in which the Agency will not be involved, include the following" with "For each means of compliance, the applicant may propose that the Agency is not involved in identified demonstration activities, based in particular on the following criteria".</p> <p><u>JUSTIFICATION:</u> The text in Proposal 12 §1.1.3 is ambiguous regarding whether Agency involvement is determined by the Agency or by the applicant. It also seems to suggest that the listed criteria automatically lead to non-involvement of the Agency. This could be understood as a major weakening of EASA as an airworthiness authority, through loss of independent Agency determination of its involvement in compliance demonstrations. A major loss of credibility of the Agency in front of the public and in front of foreign authorities may result.</p> <p>The text proposed through this comment form aims at avoiding such detrimental ambiguities, that could disrupt current satisfactory working practices and generate major conflicts about the interpretation of amended Part 21.</p>	Partially Accepted 21A.20(b)(3) and AMC 21A.20(b) Paragraph 1.1.3 are deleted in the revised text and a new paragraph 21A.38 and associated AMC is added that puts an obligation on the Agency to verify certain compliance statements.
24. Jean-Pierre Sarrato	Proposed new AMC 21A.20(b) paragraph 1.1.3	<p>The criteria listed as allowing an applicant to propose no Agency involvement do not necessarily ensure an absence of involvement is acceptable to the Agency. Such a list may lead to misinterpretations by applicants and submission of insufficient proposals for Agency involvement.</p> <p><u>JUSTIFICATION:</u> The listed criteria are not in themselves sufficient to ensure that no Authority involvement is needed. For instance, confidence with the applicant does not allow the latter to perform the necessary role of the Authority in terms of assessment of the adequacy of certification specifications, standardization between applicants, achievement of independent findings, etc... Typically, for Flight, Performance and Systems Flight Testing, determination of Authority specialists involvement has in particular been based on:</p> <ul style="list-style-type: none"> - the need for sufficient participation in order to achieve an acceptable level of technical confidence and credibility - the need for exposure to the product in order to assess the need for new requirements or new interpretations linked to specificities of the design the safety impact of which may not have been adequately anticipated - the need for involvement in compliance demonstration in order to be able to assess and confidently approve limitations, procedures or performance information included in Aircraft Flight Manuals - the need for involvement in compliance demonstration with qualitative airworthiness requirements in order to standardize their interpretation (this applies particularly to handling qualities and assessment of required crew skill) - the need for involvement in compliance demonstration with quantitative requirements in order to monitor compliance methods 	Partially Accepted (See response to Comment #23)

Comment # /provider	Para	Comment/Justification	Response
25. Jean-Pierre Sarrato	Proposed new GM 21A.20(d) "Changed Agency involvement" paragraph 2	<p>Replace "Following submission of information, the applicant and the Agency may accept a change in the Agency involvement" with "Following submission of information, a change in the Agency involvement may be necessary".</p> <p><u>JUSTIFICATION:</u> The wording in Proposal 14 appears ambiguous, suggesting that a third party may trigger a change. It is assumed that a necessary change in involvement will actually be identified by the Agency.</p>	<p>Partially accepted Agency verification of compliance findings and change in Agency involvement is now addressed in new paragraph 21A.38.</p>
26. Thien An HOANG	Chapter II-Subpart B-proposal 3 §21A33 previous Paragraph d	<p>Restore initial § (d) The applicant shall allow the Agency to review any report and make any inspection and to perform or witness any flight and ground test necessary to check the validity of the declaration of compliance submitted by the applicant under 21A.20(b) and to determine that no feature or characteristic makes the product unsafe for the uses for which certification is requested.</p> <p><u>JUSTIFICATION:</u> Authority needs visibility on systems to be certified in order:</p> <ul style="list-style-type: none"> - To get confident that the safety requirements objectives are met - To get appropriate knowledge of new technologies and features that may need adaptation to current requirement. Such knowledge is necessary for setting new CRIs. - To maintain sufficient expertise to provide equity between different applicants in terms of safety requirements. - To approve the use of the systems as described in certified document such as AFM - To get reliance of foreign authority, particularly FAA. <p>If authority is no more allowed to review any certification activity on request, authority will lose its expertise and lose credibility. This paragraph gives the authority the possibility to review certification exercise when judged necessary by the authority. It doesn't mean that authority investigate all certification activity performed by the applicant.</p>	<p>Not Accepted (See response to Comment #15)</p>
27. Thien An HOANG	Chapter II-Subpart B-proposal 9 §21A263 Paragraph b.	<p>Remove "to perform compliance demonstration activities with no involvement of the Agency"</p> <p><u>JUSTIFICATION:</u> Authority needs involvement on systems to be certified in order:</p> <ul style="list-style-type: none"> - To get confident that the safety requirements objectives are met - To get appropriate knowledge of new technologies and features that may need adaptation to current requirement. Such knowledge is necessary for setting new CRIs. - To maintain sufficient expertise to provide equity between different applicants in terms of safety requirements. - To approve the use of the systems as described in certified document such as AFM - To get reliance of foreign authority, particularly FAA. <p>Principle of "non involvement" of authority will lead to loss of expertise and credibility. Involvement or not of the Authority should be decided</p>	<p>Not Accepted Under these proposals, DOA privileges granted by the Agency will entitle holders to perform certain compliance demonstration activities with no involvement of the Agency. This will enable the Agency to target its resources at areas considered to be higher risk during product certification.</p> <p>The intent is not to reduce Agency involvement but to focus more on DOA surveillance, supported as necessary by certification in depth review of designs.</p>

Comment # /provider	Para	Comment/Justification	Response
		on case by case by the authority.	
28. Thien An HOANG	Chapter II- Subpart B- proposal 9 §21A263 Paragraph b.	<p>Restore: b) The design organisation shall allow the Agency to review any report and make any inspection and perform or witness any flight and ground test necessary to check the validity of the compliance statements submitted by the applicant under 21A.239(b).</p> <p><u>JUSTIFICATION:</u> Privilege of DOA should not prevent from transparency toward the authority. Transparency is needed for confidence. Opacity is the privilege of tyrannic systems.</p>	<p><i>(This comment is understood as a comment to 21A257.)</i></p> <p>Partially Accepted Text is partially restored to provide for Agency involvement in product related compliance demonstration activities as part of a DOA audit in order to determine the technical competence and continued competence of that organisation.</p>
29. Alain Augias	Explanatory Note Part V , Chapter 2, Paragraph a.	<p>In Option 4, add before "predetermined on the basis of the competence and experience demonstrated by the applicant" the sentence : "predetermined on the basis of the need for Agency to remain at a technical level and knowledge of the product which permit Authority specialists to perform their task for TC, post TC and Continued Airworthiness process".</p> <p><u>JUSTIFICATION:</u> In current best working practices with major DOA holders, particularly for Certification Flight and Simulator Tests, involvement of the Authority has not been only based on the competence of the applicant, which is recognized. In the Flight, Performance and Systems Flight Testing areas, determination of Authority involvement has in particular been based on: - the need for Authority exposure to the product in order to achieve an acceptable level of technical credibility, particularly in front of foreign authorities - the need for exposure to the product in order to assess the need for new requirements or new interpretations linked to particularities of the design the safety impact of which may not have been adequately anticipated - the need for involvement in compliance demonstration in order to be able to assess and confidently approve limitations, procedures or performance information included in Aircraft Flight Manuals - the need for involvement in compliance demonstration with qualitative airworthiness requirements in order to standardize their interpretation between applicants (this applies particularly when a pilot or engineering judgement is required to accept proposed procedures by crews of average skill) - the need for involvement in compliance demonstration with quantitative requirements in order to continuously standardize compliance methods between applicants</p>	<p>Partially Accepted (See response to Comment #7)</p>
30. Alain Augias	Explanatory Note Part V , Chapter 4, Paragraph a.i "	<p>Replace in Option 4 "No safety impact" with "A negative safety impact would arise if the direct involvement of the Agency is not at the appropriate qualitative and quantitative level. Delete "linked to the demonstrated capability and experience of the applicant"</p> <p><u>JUSTIFICATION:</u> In current working practices with major DOA holders, involvement of the Authority already takes into</p>	<p>Not Accepted (See response to Comment #8)</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>account DOA privileges.</p> <p>Further reduction in Authority involvement, particularly if it is frozen at an early stage, would result in a reduction in safety:</p> <p>An efficient continuous airworthiness process requires an appropriate involvement of Authorities specialists on the TC process.</p> <p>"Demonstrated capability and experience of the applicant" is very vague and subject to interpretation which could lead to unfruitful debates during the certification process, with contra- productive effects in term of mutual confidence between Authority and Applicant.</p>	
31. Alain Augias	Explanatory Note Part V, Chapter 5 , Paragraph a.	<p>Delete in Option 4 the sentence " based on the establish ability and experience of the Applicant"</p> <p>It is not understood how a equal treatment of applicants can be based on the "established ability and experience of the applicant" without any objective criteria. This is implicitly said in Option 4.</p> <p>Obviously, the level of agency involvement to reach the equity and fairness criteria should not be based on "established ability and experience of the applicant".</p> <p><u>JUSTIFICATION:</u></p> <p>Particularly in the Flight and Performance areas, certification experience has shown that a lack of involvement of the Authority quickly resulted in divergent interpretations of requirements or compliance methods. Those divergent interpretations must be detected in real time, ie during the certification process. It is believed that it is the role of the Agency to set and standardize interpretations and compliance methods among manufacturers.</p> <p>For this purpose, it seems necessary to maintain an appropriate level of Authority involvement in compliance demonstration activities, not based only on the DOA privileges.</p>	Noted (See response to Comment #10)
32. Alain Augias	Draft Opinion and Decision Part I	<p>Complete and add after "if applicable", " and taking into account the needs of Agency specialists for full filling their duties in certification process, foreseen continued airworthiness process of the product and in requirement interpretation and standardization area.</p> <p><u>JUSTIFICATION:</u></p> <p>The DOA privileges should not be the main criteria for defining the Authority involvement.</p>	Not Accepted (See response to Comment #16)
33. Alain Augias	Draft Opinion and Decision Part II Existing 21A.33 paragraph (d)	<p>Replace existing 21A.33 (d) with:</p> <p>(d) The applicant shall allow the Agency to review reports, make inspections, and perform or witness flight and ground tests identified as means of compliance, as necessary for the Agency specialists to full fill their duties. Acceptable Agency involvement shall be approved by the Agency as part of a certification programme (see 21A.20 (b)).</p> <p><u>JUSTIFICATION:</u></p> <p>Since years, the 21 A.33(d) paragraph has permitted the possibility and given the legal mean to authorities specialists for retaining their participation to any needed inspection or test. This was always understood by applicants when discussion about Authorities specialists involvement occurred.</p>	Not Accepted (See response to Comment #15)

Comment # /provider	Para	Comment/Justification	Response
		<p>Complete deletion of this paragraph will lead to many discussions and fights between applicants, arguing with their DOA privileges, and Agency specialists forced to permanently justify their needs. The result will be contra-productive by undue delay in Certification Program approval.</p> <p>Complete deletion of existing 21A.33 (d) would introduce an unacceptable uncertainty regarding whether Agency involvement is determined by the Agency or by the applicant.</p> <p>Such a deletion could be understood as a major weakening of EASA as an airworthiness authority, through loss of independent Agency oversight on compliance demonstrations, and finally loss of technical competencies, leading to the same negative safety impact as Option 3 considered in the Explanatory Note. A major loss of credibility of the Agency in front of the public and in front of foreign authorities may result.</p> <p>The proposed text aims at avoiding such a detrimental ambiguity, that could disrupt current satisfactory working practices and generate major conflicts about the interpretation of amended Part 21.</p>	
34. BAE Systems	Section A, Part IV, 1.	<p>Paragraph 1(a) states :-</p> <p><i>"Approval of minor changes to aircraft flight manuals has been a recurrent problem. Privileges extended to a DOA under 21A.263(c)(4) to approve certain aircraft flight manual changes without the involvement of the Agency are inconsistent with the identification of minor under 21A.91. It is therefore intended to review the guidance material associated with the procedures for the approval of documentary changes to aircraft flight manuals contained in GM 21A.263(c)(4)."</i></p> <p>Comment :-</p> <p>This NPA does not go far enough to correct the inconsistencies.</p> <p>The definition of minor/ major design changes is legally defined in 21A.91. An AFM change can be a product design change <u>in its own right</u> or be associated with a (physical) product design change. This needs to be better clarified.</p> <p>The NPA should state that the term "documentary" is legally difficult to define when used in the context of technical data and therefore is a source of inconsistency. The dictionary definition of "documentary" is "relating to and found in documents; aimed at presentation of reality; factual record of".</p> <p>2. Options</p> <p>The NPA is too prescriptive in identifying Option 2. It should say "Amend Part 21 and AMC& GM to clarify what is meant by a minor AFM change, the distinction between a type design change and an AFM change, and to allow minor changes to AFM's to be approved under DOA privileges"</p>	<p>Noted</p> <p>The NPA already proposes to delete "documentary changes" in 21A.263(c)(4) and together with GM 21A.263(c)(4) clarifies the scope of minor revisions to the FM that can be approved under a DOA privilege.</p>
35. BAE Systems	Section B, Part II	<p>Section B Part II</p> <p>Subpart D – Changes To Type-Certificates and</p>	<p>Not Accepted</p> <p>The proposed change does not solve the issue of the approval of</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>Restricted Type-Certificates <u>Proposed New Proposal 3A: Amend existing 21A.91 to read as follows:</u></p> <p>21A.91 Classification of changes in type design Changes in type design are classified as minor and major. A 'minor change' is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, noise, fuel venting, exhaust emission, or other characteristics affecting the airworthiness of the product. Without prejudice to 21A.19, all other changes are 'major changes' under this Subpart. Major and minor changes shall be approved in accordance with 21A.95 or 21A.97 as appropriate, and shall be adequately identified. A change in type design can be a change to the written instructions affecting the product, eg. The aircraft flight manual, and not just a physical change to the product.</p>	<p>the manual itself, by the Agency or under DOA privilege, addressed in 21A.263(c)(4).</p>
<p>36. BAE Systems</p>	<p>Section B, Part III</p>	<p><u>Proposal 22: Amend existing GM 21A.263(c)(4) to read as follows:</u></p> <p>GM 21A.263(c)(4) Procedure for the approval of minor documentary revisions changes to the Aircraft Flight Manual</p> <p>2.1 Revisions are changes to the content of the FM that can be presented in various formats, such as: - revisions, temporary, particular or general - amendments, temporary, particular or general - advance amendment bulletins - supplements - annexes - appendices...</p> <p>2.2 The following revisions to the FM are defined as minor revisions</p> <p>(a) Revisions to the FM associated with changes to type design classified as minor in accordance with 21A.91.</p> <p>(b) Revisions to the FM which are changes to type design (also identified as stand-alone revisions) classified as minor in accordance with 21A.91.</p> <p>(c) Revision to the FM which are changes to type design (also identified as stand-alone revisions), that falls under one of the following: - Changes to limitations or procedures that are more restrictive than those previously established as certification data. - Consolidation of two or more previously approved and compatible FMs into one, or compilation of different parts taken from previously approved and compatible FMs that are directly applicable to the subject aircraft. - The introduction of compatible and previously approved FM amendments, revisions, appendices or supplements.</p> <p>(d) Examples of documentary changes to the AFM that may be approved under the DOA privilege: Administrative revisions to the FM, defined as follows:</p>	<p>Comment on 2.1: Noted Since the text of 2.1 does not add to the understanding of the issue and the use of different terminology may lead to confusion, the text of 2.1 is deleted.</p> <p>Comment on 2.2(b) and (c), introduction: Not Accepted. (See response to comment #35).</p> <p>Comment on 2.2(c) (first bullet point) Partially Accepted. The text "without altering or exceeding certification data" is retained for clarity.</p> <p>Other comments: Accepted</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>(1)A— FOR AFM ISSUED BY THE TYPE-CERTIFICATE HOLDER</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM. - Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.) - The addition of compatible and previously EASA approved AFM Temporary changes, appendices or Supplements. - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM where the aircraft configuration, as related to the AFM, is identical to aircraft already in that AFM. - The removal of reference to aircraft serial numbers no longer applicable to that AFM. - The translation of an EASA approved FM into the language of the State of Design or the State of Registration. <p>(2)B— FOR AFM SUPPLEMENTS ISSUED BY STC HOLDERS</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM Supplement. - Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.) - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM Supplement in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM Supplement where the aircraft configuration, as related to the AFM Supplement, is identical to aircraft already in that AFM Supplement. - The removal of reference to aircraft serial numbers no longer applicable to that AFM Supplement <p><u>JUSTIFICATION:</u></p> <ol style="list-style-type: none"> 1. NPA does not clarify the distinction between physical changes to type design and stand-alone AFM changes to type design, which has been a source of confusion in the past. 2. The reason for elimination of the word "documentary" should be explained. 3. The new use of the word "minor" needs to tie in better with the previous use of this word. 4. Definition in AMC & GM to PART 21 of minor changes is too prescriptive and restrictive, bearing in mind the definition of minor changes in PART 21. 	
37. FAA	21A.33(d)	<p>In the NPA, you propose to delete the original text of 21A.33(d). I feel this text should NOT be deleted. I propose to keep paragraph (d) and (e) as original. This is a very significant proposed change. Has this been harmonized in any way with other authorities such as the FAA?</p> <p><u>JUSTIFICATION:</u> This text is the BASIS of the what the certifying authority's job is, to witness tests or to request to inspect any data necessary to verify compliance. The certifying authority should always have the right to review reports or data. This proposed change will take away the ability of the Agency to audit anything they may feel the applicant may have done incorrectly. The original paragraph addresses Agency</p>	Not Accepted (See response to Comment #15)

Comment # /provider	Para	Comment/Justification	Response
		<p>duties and should not burden the applicant in any way. If this paragraph is removed, it may burden other <u>validating</u> authorities in that they will now have to do more tests, investigations, or witnessing themselves if the certifying authority (EASA) cannot do this. This could burden the applicant and validating authority as validation activities could increase.</p>	
38. FAA	AMC 21A.20(b), paragraph 1.1.3	<p>The involvement of the Agency should be recommended by the applicant in the approved certification program. Recommended changes are below:</p> <p>1.1.3 the Agency level of involvement, in particular in the following activities:</p> <ul style="list-style-type: none"> - compliance documentation reviews - participation in inspections, in particular, those related to verification of compliance with 21A.33(b) - participation in audits or design reviews - participation in tests - witnessing tests - conducting tests - assessments or investigations. <p>For each means of compliance, the criteria to be used to identify activities in which the the amount of Agency involvement will not be involved, should include the following:</p> <ul style="list-style-type: none"> - how well known the design features are - usual how standard or familiar is the means of compliance - accumulated experience related to the kind of project - in-service experience - level of established confidence with the applicant, in particular taking into account the DOA privileges of 21A.263(b), if applicable. <p><u>JUSTIFICATION:</u> I do not feel the level of involvement should be put in the negative (...in which the Agency will not be involved...). The agency should be involved unless the other factors justify NOT being involved.</p>	Partially Accepted (See response to Comment #23)
39. RUAG Aerospace Services GmbH	Proposal 12, Introduction of a new AMC 21A.20(b) Paragraph 1.1.1	<p>Proposal 12, para. 1.1.1. The last bullet requires the "- identification of relevant key staff interfacing with the Agency"</p> <p>We propose to remove this requirement from this paragraph. The requirement already exists for the Airworthiness Office, see GM No.1 to 21A.239, Para. 3.1.4(a). The key staff interfacing with the Agency is listed in the Design Organization Handbook as agreed by the Authority.</p> <p><u>JUSTIFICATION:</u> The key staff interfacing with the Agency shall be those listed in the Design Organization Handbook as agreed by the Authority.</p>	Partially Accepted Text amended to add "unless otherwise identified to the Agency"
40. RUAG Aerospace Services GmbH	Proposal 9, Amendment of 21.A.263 (b)	<p>The proposal 9 refers to the new requirement for an approved certification programme in accordance with proposal 1, Amendment of 21A.20.</p> <p>21A.263 (b) includes the major repair design approval.</p> <p>We recommend to exclude the major repair design approvals (4) from (b) and insert a new subparagraph</p>	Partially Accepted Under the revised proposals attached in the Appendix to this CRD, the link between the certification programme and the level of Agency verification of compliance findings is broken.

Comment # /provider	Para	Comment/Justification	Response
		<p>as follows:</p> <p>(c) Subject to 21A.257(b), a major repair design approval shall be accepted by the Agency without further verification. The original subparagraph (c) would remain unchanged but numbered (d).</p> <p><u>JUSTIFICATION:</u> We, as a TC holder, currently have to establish numerous major repair designs for our aircraft operated worldwide. Most of the repair designs are done on an AOG basis and therefore, the requirement to obtain an approved certification programme for a major repair design approval in advance will not be practical. This would be consistent with the AMC 21A.433</p>	
41. RUAG Aerospace Services GmbH	Proposal 12, Introduction of a new AMC 21A.20(b) Paragraph 1.1.3	<p>Proposal 12, para. 1.1.3. The certification programme shall include the Agency level of involvement, in particular the following activities "-compliance documentation review" (first bullet).</p> <p>We do not understand the meaning of "compliance documentation review" with regard to the task to propose a certification programme.</p> <p><u>JUSTIFICATION:</u> The "compliance documentation review" normally is related to the presentation of the certification documentation at the end of the design and implementation/modification phase. In the light of all proposed changes in this NPA we would assume it is meant that industry then should recommend in the certification programme the depth of the Agency level of involvement for the compliance documentation review. If this is really the case, everybody then could (would) recommend a minimum (no?) Agency level of involvement for this item.</p>	Partially Accepted (See response to Comment #23)
42. RUAG Aerospace Services GmbH	Proposal 12, Introduction of a new AMC 21A.20(b) Paragraph 1.1.3	<p>Proposal 12, para. 1.1.3. The certification programme shall include the Agency level of involvement, in particular the following activities: "-participation in tests" (3rd bullet) "-witnessing tests"</p> <p>What is the difference in "participation" and "witnessing"?</p> <p>It is recommended to eliminate either one of these items.</p> <p><u>JUSTIFICATION:</u> Eliminate uncertainty about the meaning.</p>	Not Accepted "Participation" means direct involvement in testing itself; "witnessing" means just to observe.
43. EADS	Subpart J GM No.1 to 21A.243(d) (Proposal 19), GM 21A.247 (Proposal 20)	<p>Delete the requirements of specific identification of "key personnel" and the requirement to handle changes to those as significant changes in the design assurance system.</p> <p><u>JUSTIFICATION:</u> The introduction of key personnel is inconsistent with existing rules [e.g. GM No.1 to 21A.239(a), AMC 21A.239(b), GM No.1 to 21A.243(d)2.], as the personnel making decisions affecting airworthiness</p>	Accepted The new approach does not require this concept of key personnel.

Comment # /provider	Para	Comment/Justification	Response
		<p>and environmental protection are compliance verification engineers and personnel of the Office of Airworthiness.</p> <p>Also it will impose a two-class system of personnel, the "good" key personnel and the other personnel, leading to social and economic impacts and additional burden on industry side, e.g. exerting high pressure on the other personnel not having the status as key personnel, additional job descriptions necessary to control key personnel, adjustment of salary benefits for key personnel. As well as the level of confidence is strongly linked with the concept of key personnel there is the risk of job-hunting and hopping with following frequent changes of key personnel.</p> <p>In addition the introduction of key personnel may lead to unequal treatment of DOA's as those DOA's frequently working with the Agency may reach an earlier and more broaden area of confidence and by this the allowance to perform compliance demonstration with no involvement of the Agency than other DOA's less frequently working with the Agency.</p>	
44. EADS	Subpart B 21A.20(b) (Proposal 1)	<p>Delete (b)1. and 2.</p> <p><u>JUSTIFICATION:</u> The elements building up the certification programme are detailed described in respective AMC 21A.20(b) but only partially listed under 21A.20(b) thus leading to confusion. To promote correct and complete application of the certification programme and its elements any partial listing of such elements should be avoided under 21A.20(b).</p>	Accepted Text has been moved to AMC.
45. EADS	Subpart E 21A.115(b) (Proposal 7)	<p>Proposed reference to 21A.97(b) should be replaced by full text applicable to the STC case.</p> <p><u>JUSTIFICATION:</u> Wording of 21A.97(b) is not in line with wording for STC cases and therefore to simplify understanding as well as to support correct application the full text applicable to STC cases should be added instead of proposed reference.</p>	Accepted
46. EADS	Subpart J 21A.263(b) (Proposal 9)	<p>As the terms of approval of each DOA contains the privilege under which the DOA is entitled to approve minor changes and/or repairs, i.e. certification projects with no involvement of the Agency, the Agency should obligatory recognize respective DOA's scope of approval at the time of introduction of this NPA in Part 21 as the DOA's area to perform compliance demonstration with no involvement of the Agency.</p> <p><u>JUSTIFICATION:</u> Existing DOAs have already proven its level of confidence to the Agency by performing compliance demonstrations in the area of minor approvals and minor repairs.</p>	Noted The existing privilege related to minor changes and repairs is not affected by the NPA.
47. EADS	Subpart B AMC21A.20(c)) (Proposal 13)	<ol style="list-style-type: none"> 1. Replace certification plan by certification programme 2. Delete "or with an equivalent document submitted as part of the application for a design approval" 	<ol style="list-style-type: none"> 1. Accepted 2. Accepted

Comment # /provider	Para	Comment/Justification	Response
		<p><u>JUSTIFICATION:</u> 1. Following 21A.20(b) and respective AMC the compliance documentation is part of the certification programme approved by the Agency and to ease the control of the compliance demonstration activities and documentation there should be a direct link between the compliance document and the corresponding certification programme; even for design projects not requiring long and complex compliance demonstration activities the concept of an approved certification programme is implemented as outlined in 21A.97 and 21A.114 and respective AMC.</p> <p>2. This NPA introduces the concept of an approved certification programme, whose standard should not be impaired through the acceptance of "equivalent documents". In addition the term "submitted as part of the application for a design approval" could be misunderstood that a document containing the compliance document structure has to be submitted to the Agency with the application for a design approval but such a requirement does not really exist.</p>	
48. EADS	Subpart J AMC 21A.263(b) (Proposal 21)	<p>Delete first sentence under 2. "The terms of approval may identify areas where confidence in the DOA has been established ... in certification projects."</p> <p><u>JUSTIFICATION:</u> To identify the areas of confidence in the terms of approval will lead to additional administrative burden for the Agency to control and issue such terms of approval, as - these may change often by individual changes or experienced performance, and - all such technical fields, product category/type and respective means of compliance etc. where the DOA is entitled to perform compliance demonstration with no involvement of the Agency have to be explicitly described in each DOA's terms of approvals, thus consuming limited resources of the Agency without any further safety benefit.</p> <p>Finally to publish the Agency's level of confidence with a DOA by its terms of approval may also lead to unequal treatment and acceptance of DOA's by their customer, as a two-class-system of DOA's will be introduced, i.e. DOA's with and without involvement of the Agency in certification projects.</p>	<p>Partially Accepted As the revised proposal no longer refers to confidence, AMC 21A.263(b) has been cancelled.</p>
49. DGAC/ CEV	new AMC 21A.263 b)	<p>remove this new AMC.</p> <p><u>JUSTIFICATION:</u> The agency involvement can not be predetermined on the established level of confidence with the DOA. The current concept of DOA is to certify that some predetermine tasks can be delegated to the applicant, provided that those tasks are compliant with a set of technical criteria. It is today a very significant step to propose to delegate task only based on established level of confidence with the DOA, without firstly considering technical characteristics of the task. A product is not only safe because its development method follows a well structured process but also because its design integrates all the necessary regulation requirements with the correct technical meanings and</p>	<p>Accepted</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>substantiations. This second aspect of safety can not be managed only by the applicant, it needs agency involvement and can not be dealt with established level of confidence with the DOA (based on demonstrated capability in procedures, qualified staff, satisfactory experience).</p> <p>In addition, independence is a key point in certification process and highly necessary for contribution to safety. The level of independence reached with Agency involvement in certification process, is not reachable by the applicant alone.</p> <p>Moreover, it is clear that for some new products introducing new technology, important Agency involvement is necessary and the "no involvement" concept is not applicable if the agency intends to maintain the current level of safety reached for aircraft certification.</p>	
50. DGAC/ CEV	(21A.20) a) b)	<p>1. (21A.20) a) removed sentence should be restored</p> <p>2. (21A.20) b) Should be replaced by "the applicant shall propose a certification programme, which the Agency shall approve, detailing:</p> <p>1. 2."</p> <p>Removing item 3 and introducing the following statement: "The Agency shall determine its involvement in the compliance demonstration activities. The Agency involvement shall be based on experience gained on similar previous certification program , on the level of design novelties introduced, the knowledge of applicant through already granted DOA privileges is also a way to refine Agency involvement."</p> <p><u>JUSTIFICATION:</u> Since years, it has been the certification authority working method to investigate and participate to any compliance demonstration activities deemed technically relevant and necessary to assess compliance with regulation requirements. This working method has shown its benefits, as today when a thorough certification process is followed, including AA actual involvement, a high level of safety is reached. The actual certification process is mixing applicant and AA understanding of regulation requirements to meet a comprehensive and convincing compliance demonstration.</p> <p>The AA participation to any kind of compliance demonstration activities is, in fact, performed to satisfy several objectives contributing to achieve this high level of certification standard and this high level of safety.</p> <p>AA involvement in compliance demonstration activities is currently agreed with the applicant, and correctly sequenced in the global certification process.</p> <p>Involvement of certification authority in any compliance demonstration activities allows AA to maintain a high level of competency on the intent of regulation requirements and on means of compliance acceptable to meet regulation requirements. AA is</p>	<p>1. Not accepted The part deleted is now covered by paragraphs 21A.20(b) and (c).</p> <p>2. Partially Accepted New paragraph 21A.38 places an obligation on the Agency to verify certain compliance statements.</p> <p>The level of the Agency's involvement can be predetermined, providing more legal certainty to the applicant and consistency regarding the level of involvement of the Agency.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>also able to better assess aircraft design novelties and particularities to refine acceptable and convincing compliance demonstration techniques. This involvement allows AA to support applicant confidence that a proposed product is fully compliant to certification requirements intent and that it complies with actual comprehension of this intent on similar project worldwide. AA confidence and assessment is based on the actual working method that enables to acquire the necessary international knowledge of required certification standard to achieve the necessary level of safety.</p>	
51. DGAC/ CEV	21 A.33 d)	<p>restore removed paragraph 21 A.33 d)</p> <p><u>JUSTIFICATION:</u> The Agency should maintain its actual capability to investigate in depth any compliance means proposed and its ability to perform or witness any flight or ground tests. It is very essential that Agency keep a sufficient involvement in the compliance demonstration activities including means of compliance assessments, compliance documents review, compliance documents analysis, participation or witnessing to flight or ground test. It is the unique way for AA to maintain its knowledge of the current aircraft design, of the used compliance demonstration techniques, of the applied and proposed means of compliance. It is also the only mean to have a significant contribution to the certification process and to safety level reached. The agency shall save, renew, improve its certification expertise to maintain its high contribution level to the certification process and for the overall safety of transport aircraft.</p> <p>The Agency involvement in any report, inspection, tests used for compliance demonstration with regulation requirements enables to maintain competency of agency staff and a high technical knowledge, that guarantees the standardization of safety level for transport aircraft. It guarantees the high efficiency level of assessment performed by the Agency certification experts and specialists, and a very good mutual understanding with applicants, as well as achievement of a high level of safety.</p> <p>Certification expertise and Agency efficiency comes from experience of direct involvement with work performed during compliance demonstration activities, and this expertise and efficient contribution to safety is maintained if experts have a sufficient level of involvement.</p> <p>In addition, in order to be able to deal with novel features, certification experts shall be sufficiently widely involved in certification activities (worldwide) and compliance demonstration activities to standardize an acceptable level of safety for novelties. This work can not be done by applicant given its single culture. There are many examples of high contribution of the AA and Agency in this area.</p>	<p>Not Accepted (See response to Comment #15)</p>
52. DGAC/ CEV	21A.97 (a)	<p>restore removed sentences from actual part 21A-97 (a)</p> <p><u>JUSTIFICATION:</u> Major modifications are significant modifications that impact the design of a certified transport aircraft. It is</p>	<p>Not Accepted 21A.97 refers to 21A.20, under which data will be submitted, as necessary.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>a way for certification authorities and agency to maintain its knowledge of certified products and its evolutions (the most significant ones) and ensure a positive and efficient contribution to safety. Involvement in major modifications is also a way for Agency to be able to organize an efficient continued airworthiness follow-up of certified transport aircraft, by keeping understanding of the design and its evolution, comprehension of potential weaknesses and associated improvement areas. It enables the Authority to close the safety loop by in service experience and witnessing.</p> <p>Major modifications are also ways to significantly modify a certified type by introducing design novelties and significant novel features. In this case, if the applicant is stating alone (without agency involvement) compliance with applicable certification requirements, Agency would reduce opportunity for early familiarization with new technologies. It would also significantly reduce safety as applicant could misunderstand how regulation applies to such novel feature and not certify its products to the required level of safety.</p>	
53. DGAC/ CEV	21A.114 a)	<p>21A.114 a) "applicant for STC shall comply with 21A.97 and show that the change ...as specified in 21A.101"</p> <p><u>JUSTIFICATION:</u> Some STC are significant modifications that impact the design of a certified transport aircraft. It is a way for certification authorities and agency to maintain its knowledge of certified products and its evolutions (the most significant ones). Involvement in STC is a way for Agency to be able to organize an efficient continued airworthiness follow-up of certified transport aircraft, by keeping understanding of the design and its evolution, comprehension of potential weakness and associated improvement areas.</p> <p>STC are also ways to significantly modify a certified type by introducing design novelties and significant novel features. Following what is proposed in the NPA, the applicant could state alone (without agency involvement) compliance with applicable certification requirements. Agency would reduce opportunity for early familiarization with new technologies. It would also significantly reduce safety level as applicant could misunderstand how regulation applies to such novel feature and not certify its products to the required safety level.</p> <p>Without sufficient involvement of the agency this competency would be lost. The applicant will be the only one to have the product knowledge and will have subjective understanding of what needs to be done to achieve the required level of safety to comply with regulation requirements.</p>	<p>Not accepted 21A.114 is modified by directly including the text of 21A.97. The reference is therefore no longer necessary.</p>
54. DGAC/ CEV	21A.263 b	<p>"The holder of a design organisation approval shall be entitled, within its terms of approval and under the conditions defined in the design assurance system, to perform compliance demonstration activities with involvement of the agency in accordance with the approved certification program.."</p> <p><u>JUSTIFICATION:</u> Agency involvement should be stated in certification</p>	<p>Partially accepted Intent is accepted. Under the revised proposals the privilege is subject to mandatory Agency verification of compliance findings, as defined in 21A.38.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>program and agreed with the applicant, the "no involvement" should be only a result of investigation and understanding of the design modification or STC proposed for certification. It should not be a granted privilege based on applicant organization approval, but potentially granted based on STC/modification type.</p> <p>This privilege should be assessed when approving, reviewing the certification program, and the involvement should be determined and refined during the certification process at different stages.</p>	
55. DGAC/ CEV	AMC 21A.20(b) 1.1.3	<p>Remove 1.1.3 from part 21. The agency level of involvement in certification activities should not be proposed by the applicant but by the Agency based on criteria to be refined internally within the agency.</p> <p><u>JUSTIFICATION:</u> It seems when reading the criteria used to determine agency level involvement that it opens increasing room for no involvement and that it could be very easy for the applicant to justify no agency involvement whatever the project and its characteristics. Criteria for mandatory agency involvement should be also determined, in order to guarantee that when technically relevant agency involvement can be required. For instance, a novel feature should not be certified without Agency involvement, even if, the applicant can argue no involvement due to use of usual means of compliance, or high level of established confidence.</p> <p>Agency involvement can not be determined in details at certification program level but need to be refined and detailed by the agency during certification process , during appropriate stages.</p> <p>The safety level reached in certification of transport aircraft is mainly based on the fact that an independent technical assessment is performed by the agency. An independent assessment can be efficiently performed if the agency is free to investigate any area, documents, tests deemed technically necessary or relevant.</p> <p>The NPA is proposing that the applicant is managing agency involvement, it is not compatible with achieving a high level of safety and the adequate level of independence required in certification process.</p>	Partially Accepted (See response to Comment #23)
56. DGAC/ CEV	new AMC 21A.97 -2	<p>remove in 2. Item 6 and in particular "level of agency involvement"</p> <p><u>JUSTIFICATION:</u> As previously argued in my previous comments it should not be the applicant that is proposing Agency involvement in compliance demonstration activities, but the agency itself that determines its detailed involvement during certification process. The involvement determination should be based on knowledge of the design, novelties, similarities, following internal validated criteria that need to be formalized (certification engineering judgement to be captured and formalized internally in the agency).</p>	Accepted
57. DGAC/	new AMC 21A.114 -2 /	<p>remove in 2. Item 7 and in particular "level of agency involvement"</p>	Accepted

Comment # /provider	Para	Comment/Justification	Response
CEV		<p><u>JUSTIFICATION:</u> As previously argued in my previous comments it should not be the applicant that is proposing Agency involvement in compliance demonstration activities, but the agency itself that determines its involvement during certification process, based on knowledge of the design, novelties, similarities.</p> <p>The agency shall maintain the actual safety level reached in certification of transport aircraft, by focusing its involvement on important and strategic areas. The involvement of the agency can not be predetermined or frozen at the level of certification program. It can't either be based on DOA privilege only, but it shall be determined following a technical assessment of a certification project based on agency certification expert analysis. This analysis is necessary to perform a relevant agency involvement determination. The involvement in compliance demonstration activities has to be determined based on certification engineering criteria (design novelties, application of new regulation, etc.), and shall be integrated to the certification process itself.</p> <p>For instance, for the design of a totally new aircraft equipped with new technologies, even an experienced DOA holder should expect important Agency involvement for certification process, whereas for well known product with no novelties this DOA holder could foresee a low level of involvement from agency.</p>	
58. LTH	GM No. 1 to 21A.243(d)	<p>Reduce 3.3.3 to DOAs with a privilege to design products (not changes or repairs). or / and Detail the staff e.g. as management staff (no compliance verification staff).</p> <p><u>JUSTIFICATION:</u> GM 21A.247 - Significant changes on design assurance system - Responsibilities / Change of the management staff refers to key personal identified in §3.3.3. The personal of LHT which could be defined by 3.3.3 might be no management staff (could be engineering staff as well).</p> <p>LHT has a system to qualify and authorize design personnel as well as engineering departments. Therefore, an application for a significant change upon changes of persons would not improve LHT design assurance system and would increase the administrative workload.</p>	<p>Noted This GM has been deleted. (See response to Comment #43)</p>
59. LTH	21A.20 (b) and 21A.20 (d)	<p>Delete 21A.20 (b) 3. Set up a separate item for STC/Repair projects, e.g. as item e:</p> <p>For repairs or changes the agency shall issue an evaluation program upon approval of the certification program. It shall refer to the certification program. It shall detail the involvement of the agency in the compliance demonstration..... It shall be updated where conditions arise that may cause a departure/diversion from the approved certification program.</p> <p>Amend current 21A20(d) accordingly.</p> <p><u>JUSTIFICATION:</u> We do appreciate a clear statement of the</p>	<p>Noted The text of 21A.20 has been simplified.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>involvement of the agency in the certification process. The whole process will become more stable and planning should be easier.</p> <p>Since the involvement of the Agency will be defined by the Agency itself it would be helpful to put the involvement of the Agency into a separate Evaluation Program referring to the certification program with a required acceptance by both sides.</p> <p>It should be avoided that the certification program has to be revised too often to reduce the administrative burden on EASA as well as on the DO.</p> <p>In addition, the existing IT tools of certification management have to be adapted which has an impact on the costs without further value and improvement of the certification program.</p>	
60. LTH	AMC 21A.20 (b)	<p>For change / repair projects delete 21A.20 (b) 1.1.2 (project schedule and milestones) and set up as a separate item, e.g. 1.6:</p> <p>For changes and repairs additional project documentation should be attached to the certification program as following:</p> <ul style="list-style-type: none"> • a project schedule including major milestones • the evaluation program of the involvement of the agency <p><u>JUSTIFICATION:</u> Since these data is varying especially on short term projects (STC 's/ Major Repairs) it is less effort for the agency as well as for the DO to control the data separated from the certification program with a need for acceptance by both sides.</p>	<p>Not accepted For Major changes and STC, see simplified mechanism in AMC 21A.97 and 21A.114, paragraph 2.</p> <p>Major repairs are not subject to a certification programme.</p>
61. LTH	AMC 21A.20 (b)	<p>Delete 21A.20 (b) 1.1.3 (criteria for involvement / no involvement of the agency) for STC or Major Repair Projects</p> <p><u>JUSTIFICATION:</u> The level of involvement should be defined by the agency. LHT feels that the independence of the office of airworthiness inside the organizations should be supported by this EASA definition.</p>	<p>Partially Accepted (See response to Comment #23)</p>
62. LTH	AMC 21A.20 (b) 2	<p>Exchange "all revised elements" by "all revised elements relevant on the coordination between the Agency and the DO". Assure that the current certification program is approved upon approval of the product, the change or repair.</p> <p><u>JUSTIFICATION:</u> For short term projects the certification program is a quickly changing document. A formal approval of each amendment is difficult to realize in time. The formal workload should be reduced to the necessary extent for the agency as well as for the DO.</p>	<p>Not Accepted As the requirement for the Agency to formally approve changes has been removed, the burden of maintaining the programme up to date is reduced.</p>
63. CAA Sweden	General	No comments	Noted
64. Hispano-Suiza – Joseph LLERES	AMC 21A.20(b)	<p>The appendix to AMC 21A.20(b) introduces the means of compliance MC9 "Equipment Qualification". It is proposed to complete the note as follows:</p> <p><u>Proposal 1:</u> Note : Equipment qualification should be understood as the demonstration that the equipment</p>	<p>Not Accepted It should be understood that the means of compliance are by definition associated with compliance with the certification specifications.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>operates properly in its declared environment. Equipment qualification is a process ...</p> <p><i>Proposal 2: Note : Equipment qualification should be understood as the demonstration that the equipment meets its certification requirements. Equipment qualification is a process ...</i></p> <p>JUSTIFICATION: In the industry, the term "Equipment Qualification" usually means the demonstration that the equipment meets its requirements. These requirements cover more than the certification requirements. So this term can be misunderstood. For instance, the AMC to CS-E 80 "Equipment" does not speak about qualification but states that "All equipment, including all electronic units, sensors, harnesses, hydromechanical elements, and any other relevant elements or units, should be shown to operate properly in their declared environment."</p>	
65. SNECMA	AMC 21A.263(b)	<p>2. The terms of approval may identify areas where confidence in the DOA has been established at a level allowing for no Agency involvement in certification projects. This information should be taken into account when establishing any approved certification programme in accordance with 21A.20(b). The level of confidence established for an individual area depends on qualification of may be based upon key personnel only, or organisation performance only, or a combination of both.</p> <p>JUSTIFICATION: Qualification of key personnel is measurable to determine delegation in the frame of DOA. "Organisation Performance" is vague and not measurable; therefore we propose to delete.</p>	Noted (See response to Comment #48)
66. Alain Augias	Proposed new AMC 21A.20(b) paragraph 1.1.3	<p>Delete the second paragraph " For each means of compliance, the criteria..."</p> <p>JUSTIFICATION: The criteria addressed in this paragraph are very ambiguous and subject to not shared interpretation between the applicant and the Agency. Criteria like "well known", "experience", "level of confidence" could be used by internal Agency policy but not by the applicant . This is to the Agency to appreciate those criteria.</p> <p>This is not to the applicant to determine the involvement of Agency specialists.</p> <p>The criteria to be used for involvement of Agency specialists should be developed internally as a guideline and for each panel.</p>	Partially Accepted (See response to Comment #23)
67. Dassault Falcon Service	§ 2.2 to GM 21A.263(c)(4)	<p>Add to §2.2.(c)(2) to GM 21A.263(c)(4):</p> <p>- The addition of a new STC to an existing FM supplement.</p> <p>JUSTIFICATION: If FM supplement already approved, there is no added value by agency to re-approved the same FM supplement for an other modification.</p>	Partially Accepted The text will be amended to read as follows: - <i>The addition of a new STC to an existing FM supplement, when this supplement is fully applicable to the new STC</i>
68. Dassault	§ 2.2 to GM 21A.263(c)(Add to §2.2.(c)(2) to GM 21A.263(c)(4):	Partially Accepted For both (c)(1) and (c)(2), a new

Comment # /provider	Para	Comment/Justification	Response
Falcon Service	4)	- Changes of the FM supplement which does not affect limitation or procedures. JUSTIFICATION: There is no added value by agency if there is no modification of limitation and no modification on procedures.	sentence is added to read as follows: - Changes to parts of the FM that are not required to be approved by EASA
69. Dassault Falcon Service	§ 2.2 to GM 21A.263(c)(4)	Add §2.2.(d) to GM 21A.263(c)(4): (d) For FM supplement issued by STC holder: edition of a new FM supplement already approved for other type-certificated aircraft. JUSTIFICATION: There is no added value by agency if FM supplement already approved. DOA holder is responsible to verify the applicability of each A/C certification basis.	Not Accepted It is not necessarily the same supplement for another type.
70. CAA, NL	AMC 21A.20(b), paragraph 1.1.3	In the second list in this paragraph (criteria to be used to identify activities in which the Agency will not be involved): Propose to add the following to the list, as last-but-one bullet: " - tests of which the results can be objectively determined and where the results of the tests are not dependent on the precise test execution " JUSTIFICATION: Standing practice in determining participation of Authorities representatives in testing as part of compliance demonstration, in particular in flight test, is to delegate only tests where the results can be objectively determined - in other words, no subjective judgment is needed, and the results of the test are not dependent on the precise test execution. One example of testing that has a subjective character is the flight testing to verify stall handling.	Partially Accepted (See response to Comment #23)
71. ATS Int.	Proposal 22 : amend existing GM to 21A.263 § (c) 4.	§ 2.1, § 2.2 (a) & (b) : : Are these paragraphs applicable to STC Holder as well as TC Holder	Noted 2.1 and 2.2 are simply introduction and definitions. Both TC and STC DOA can be granted minor change authorisation within their terms of approval.
72. ATS Int.	Proposal 21 : introduce a new AMC 21A.263(b)	§ 2 : What means "no Agency involvement in certification process". ? Does the process for STC application be changed (STC application form ? NAA representative ?) ? Does this applicant send all its certification documents to the agency ? Who is going to issue a technical visa necessary to obtain the STC ? What consequences on fees and charge ?	Noted Following comments received and re-drafting, the AMC has been deleted.
73. Virgin Atlantic Airways	AMC21A.14(b)	The following text has been deleted without replacement 2 Management of the (supplemental) type certificate process 2.1 For a particular project, at the beginning of the process, the applicant must propose How does the agency plan ensure that certification programs are received from the applicant in a timely	Not Accepted The intent of the deleted text is retained by cross-referring to AMC 21A.20(b), which includes the concept of a certification programme developed at the beginning of the process.

Comment # /provider	Para	Comment/Justification	Response
		<p>manner i.e. before the commencement of the certification process? The commenter believes that EASA should not delete this sentence.</p> <p>JUSTIFICATION: It is important that an agreement is reached between the agency and the applicant before the start of any certification activities in order for the process to be effective.</p>	
74. Virgin Atlantic Airways	21A.20 C	<p>The scope of this rule is changing to include the certification programme and the demonstration of compliance with the applicable certification basis, therefore the rule should specify that the certification basis should be defined at this time.</p> <p>21A.20 (b) 1. <i>Identify the applicable certification basis, including special conditions in accordance with 21A.17.</i> 2. <i>The means of compliance; andcontinue as per NPA.</i></p>	<p>Not Accepted 21A.20 is entitled "compliance with the type-certification basis and environmental protection requirements". In practice it could be expected that the type-certification basis and certification programme are developed together.</p>
75. Virgin Atlantic Airways	General	<p>When does the agency plan to evaluate DOA's for their capabilities in relation to the involvement of the agency in certification testing. If this was done at the 1st application following the implementation of this rule it may delay certification. Does the agency plan to delegate this to NAA's to be done asap after implantation of the rule, possibly incorporated into a DOA annual review?</p>	<p>Noted There will be an implementation plan associated with the new rule. The Agency will organise the necessary additional evaluation to avoid disruption of business.</p>
76. Virgin Atlantic Airways	General	<p>If a certification test, which is deemed outside of the capabilities of a DOA, is subcontracted to a (capable) 3rd party that does not have a DOA (e.g. test house) how will this be viewed by the agency as part of the certification plan? Would the agency allow this test to be carried out without agency witnessing. The commenter proposes that this would be acceptable, as credit should be given to the capabilities of specialist organisations.</p> <p>JUSTIFICATION: Currently it is the responsibility of the DOA to evaluate their capabilities relating to the testing to be carried out.</p>	<p>Noted The NPA is not affecting the current rule on this aspect and the current DOA responsibility remains. The DOA can only apply for design approvals (like STC) if it has the full certification capability under its scope, either in house or through appropriate arrangement with another organisation, like a test house. New 21A.38(a) puts an obligation on the Agency to verify compliance demonstration when outside of the privileges of a DOA.</p>
77. DGA Defence	V.1. (a) (b) (c)	<p>It is declared in the explanatory note that the intended effect of the NPA is to improve the legal certainty of the certification process. Furthermore it is understood in the NPA, that this will be obtained through less or no involvement of the Agency specialist in the certification process. It is unclear why a predetermined Agency involvement (up to no involvement) will alleviate legal uncertainty.</p> <p>The proposal to request to predetermine the level of involvement of the Agency is unrealistic when considering the variety and complexity of design solutions in the aeronautical Industry.</p> <p>JUSTIFICATION: The implicit assumption is that the product is perfectly defined, determined and known at the time when the level of involvement of the Agency for inspection will be decided. It is the various</p>	<p>Noted The legal certainty is improved by assigning clearly the responsibility to Industry, on one side, and the responsibility of the Agency, on the other side, taking into account the existence of an approval of the organisation itself (DOA).</p> <p>Following comments received, the text of 21A.20, 21A.257 and 21A.263, in particular, have been redrafted and a new 21A.38 added.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>inspections (especially simulator/flight test) of the Agency during the certification process which allow the experts of the Agency to identify unexpected specificities of the product.</p> <p>It is not understood why a predetermined involvement of the specialists of the Agency's specialists would provide more legal certainty unless to imagine the limited involvement would preclude specialists to identify unexpected significant system behaviours impacting safety and requiring special attention from them.</p> <p>The concept of an approved certification programme is not in contradiction with the concept of an adequate involvement of the Agency specialists dependent of the findings in the compliance demonstration. Due to the technical complexity of aeronautical products with permanent raising of new technology allowing unexpected design concept, most unusual system behaviour may be determined only during the certification process and through the adequate involvement of the certification experts of the Agency who bring an independent point of view. This is clearly what is coming from the experience gathered by the certification flight specialists.</p>	
78. DGA Defence	I. general §5	<p>"The text of this NPA has been developed by a dedicated ..."</p> <p>It is declared in the explanatory note that the NPA has been developed in accordance with the Article 43 of the Basic Regulation. This is questionable.</p> <p><u>JUSTIFICATION:</u> According to the Basic Regulation and article 43 quoted in the above referenced paragraph of the NPA , the procedures for issuing opinions « shall a) draw on expertise available in the aviation regulatory authority in the member state, b) whenever necessary involve appropriate experts from relevant interested parties. »</p> <p>This NPA modifies strongly the products certification process, significantly limiting the possibility of Agency specialists to perform or witness inspection, flight test and ground test for compliance demonstration. To be in accordance with the regulation 1592/2002, the rule making group should have involved an adequate representation of Authority PCM and specialists who have routinely experience of inspection, flight test and ground test in major European certification programmes with the actual knowledge of the safety benefit of the Agency involvement in certification process. Intention of the Basic Regulation, article 43, has not been fulfilled.</p>	Partially Accepted (See response to Comment #11)
79. DGA Defence	A.V.4 (a) All identified impacts i. Safety	<p>The safety impact of Option 4 is significantly underestimated.</p> <p><u>JUSTIFICATION:</u> There is a non understandable link made between "the certification programme" which is the agreed programme that should be followed by the applicant for compliance demonstration and the level of involvement for inspections of the Agency specialists during this compliance demonstration programme led by the applicant. The implementation of a certification programme during the certification</p>	Noted (See response to Comment #8)

Comment # /provider	Para	Comment/Justification	Response
		<p>process of large projects is already a standard in European certification. However, a certification programme must not imply a limitation in the involvement of Agency specialists. It cannot be agreed without better argumentation that a predetermine level of involvement of Agency specialists will allow them to determine most of weakness and potentially higher risk areas. On the contrary, flight specialists have the experience that most of weakness and higher risks areas are identified thanks to their continuous and close involvement in the compliance demonstration defined throughout the certification programme</p> <p>Based on the experience of specialists on everyday certification task, the negative safety impact of this option n°4 is underestimated. Numerous unexpected system behaviours with safety issues are detected through the direct involvement of Agency specialists who bring an external point of view in the certification process.</p> <p>The safety impact analysis for option 3 introduces a pertinent remark: the benefit of independent technical oversight to balance the internal pressure coming from business objectives especially when considering the introduction of new technology. The example of the British Gliding Association is non relevant when considering most of the certification activities addressing complex products as the A380. It is unclear how option 4 can avoid the critic raised for option 3: the characteristics of the aviation Industry is to invent constantly new design solutions which carry always high potential for unforeseen issues. Without an independent certification body witnessing freely the certification activity, the balance would lend toward the underestimation of the safety impact of unexpected issues.</p>	
80. DGA Defence	A.Explanatory Note: V Regulatory Impact Assessment ii. Economic B.Draft Opinion and Decision Subpart B 21A33 21A257	<p>The analysis of the relative economic impact of Option 1 compare to Option 4 is questionable.</p> <p>JUSTIFICATION: Economic impact of option 1: Thanks to the enforcement of IR 21A.33 & 257, the involvement of Agency specialists throughout the certification process allows to avoid uncertainties at the level of acceptance of compliance documentation. If there are uncertainties, they come from the detection of safety or non compliance issues raised by the design and not detected by the manufacturer during the engineering development phase. Less involvement of Agency specialists in the certification demonstration after removal of IR 21A.33 (d) & 257(b), may decrease uncertainties but with a direct safety impact because several safety or non compliance issues will not be detected prior to the deliverance of certification.</p> <p>Economic impact of option 4: The declaration is based on the assumption without demonstration that the Agency involvement by inspection or witnessing of certification activities has a significant cost impact. Taking into consideration that the certification demonstration will have to be carried out whatever the case with or without the witnessing of Agency specialists, we have no convincing examples that the enforcement of IR 21A.33d & 257b has been</p>	<p>Noted The issue relates to the legal certainty of the Agency accepting compliance documents submitted by a DOA holder. As the rules stand, 21A.257 allows the Agency to challenge any submission and can demand additional investigations be carried out in verifying compliance. This can add an additional cost to industry and negates any true privilege of holding a DOA.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>significantly costly in the frame of past projects. Taking the example of flight test, the certification flights have to be performed and the cost of the flight is not dependant to the participation of Agency Flight specialists . At the opposite, the adequate and continuous involvement of Agency specialists throughout the certification activity avoids that unexpected conditions arise and be detected at the last minute that would have a true cost and project planning impact. If the argument of economic impact is used in order to substantiate the NPA, the economic impact should be established transparently and objectively taking all parameters into consideration.</p>	
81. DGA Defence	A.V.4(b) B. AMC 21A.20(b) 1.1.3	<p>Option 4 set the principles of inequity between applicants. This will be the source of endless conflicts time and money consuming.</p> <p><u>JUSTIFICATION:</u> If some inconsistencies had happened in the application of certification procedure, it should be recognised the Agency being a young Agency, there is certainly room for improvement of internal working procedures. It is not believed that the proposed modification of IR 21 will improve the consistency and equity between projects. At the opposite, it is believed less involvement of specialists will create more inequity especially, when reading the argumentation for option 4. For option 4 (retained option), the level of involvement of Agency would be predetermined in the certification plan, on the established ability and experience of the applicant. It seems that this option set the bases for inequity between applicants. What will be the objective criteria for ability and experience? In the high technology aviation domain, these parameters may move quickly and should be always considered in relation to the complexity of the project.</p> <p>When reading options 1 and 4 close to the other , options 4 looks the most unfair carrying the greatest potential for inequity. Option 4 would be the source of endless conflicts.</p>	Partially Accepted (See response to Comment #23)
82. DGA Defence	A. V. 5.	<p>To base the level of Agency involvement ahead of the Certification Programme is unrealistic. The adequate involvement of Agency specialists is dependant of many conditions and not simply the Agency's confidence in applicant's expertise.</p> <p><u>JUSTIFICATION:</u> The cornerstone for option 4 retained by the NPA, is to base, ahead of the certification programme, the level of the Agency expert involvement on the level of confidence with the applicant. The assumption is that safety will be assured through the Agency's confidence in the level of the Applicant's expertise and his ability to design and certify a product.</p> <p>We believe ability or expertise is not an absolute and should always be considered in relation to the complexity of the project. It would be worthwhile to note that, usually, more expert is the applicant, more complex, risky and technologically ambitious are the projects developed by this applicant. Therefore the potential for unsafe or non compliant design is not always reserved to "small" applicants. Common</p>	Partially Accepted (See response to Comment #23)

Comment # /provider	Para	Comment/Justification	Response
		<p>sense and certification specialist experience show that more ambitious and more complex is the project, more unexpected product behaviours, raising safety concerns, neither anticipated nor identified by the applicant, are detected with participation of Agency specialists during the certification process.</p> <p>In the fast evolving aviation world, the confidence in ability and expertise should never be a static assumption and should be gained by specialists, through the satisfactory monitoring of the applicant certification activity, which means free inspection and witnessing adequately tuned along every certification process.</p>	
83. DGA Defence	B II Proposal 3: 21A33 (d) deleted B II Proposal 9: 21A.263 (b)	<p>The concept of "No Agency Involvement" proposed through the NPA is in contradiction with Article 15 of the Regulation (EC) N° 1592/2002 of the European Parliament and of the Council.</p> <p>JUSTIFICATION: It is not understood how the concept of "No Agency involvement" introduced by this proposed Draft Opinion and Decision is compatible with the Regulation (EC) N° 1592/2002 of the European Parliament and of the Council, article 15. 1.e). " ...the Agency shall ... conduct itself or through national authorities or qualified entities, technical inspections, associated with products, parts and appliances certification." The concept of "No Agency Involvement" is in contradiction with article 15 of the Regulation stipulating that the Agency ...shall conduct ...technical inspections.</p> <p>Note: The wording "<u>technical inspections</u>" must not be interpreted as the design process and procedures inspections or audits performed by the Agency in order to grant, or extend DOA privileges. These inspection and audits for organisations are addressed separately through Article15.2.</p>	<p>Not Accepted Article 15 of the Regulation (EC) No 1592/2002 (now replaced by Article 20 of Regulation (EC) 216/2008), includes both product certification and design organisation approval activities. Furthermore, its Article 5.2.d includes the notion of privileges in the demonstration of capability. There is no contradiction.</p>
84. DGA Defence	B. II Proposal 1: 21A.20.(e)	<p>According to the Basic Regulation, one condition for issuing a type certificate is the product has no feature or characteristic making it unsafe. No Agency involvement with no other barrier in the NPA, introduces an implicit deviation from the Basic Regulation.</p> <p>JUSTIFICATION: In amended Subpart B 21A.20 (e), the addition of "according to the approved certification programme established under "paragraph (b)" is a deviation from the Regulation N° 1592/2002 article 5 §2.a. It introduces an undue restriction in the application field of the Regulation. With the concept of "No Agency Involvement" it gives to understand that even though the product had features or characteristics making it unsafe for operation, it would receive a type certificate based solely on the applicant declaration. The article 5 stipulates that the type certificate shall be issued when the applicant has shown that the product complies with the type certification basis ...and when it has no feature or characteristic making it unsafe for operation. The simple declaration of the applicant that it "has shown compliance ... according to the approved certification programme ...", alleviate the guarantees for a safe product when considering the NPA concept of "No Agency Involvement". The</p>	<p>Not Accepted The comment is incomplete and wrong. No Agency involvement is only possible with a DOA and, in this case, the requirement of Regulation (EC) No 216/2008 Article 5 §2.a is reflected directly in 21A.265(c) – Obligations of the DOA Holder.</p>

Comment # /provider	Para	Comment/Justification	Response
		only compensating factor to the deviation from the Basic Regulation is the guidance material 21A.20 (d). It is not legally satisfactory that a deviation to a Regulation of the European Parliament and Council be bound only by a Guidance Material.	
85. DGA Defence	B II Proposal 3 Amended 21A.33	<p>Deletion of current 21A.33 (d) makes an implicit deviation to the Basic Regulation.</p> <p><u>JUSTIFICATION:</u> Subpart B 21A.33 (d) The intention of the deletion of this paragraph is unclear. Does this deletion mean that an applicant will be entitled to refuse the Agency, acting as an Aviation Authority, review report or make inspections etc ... ? If such, the spirit of this deletion is not in accordance with Regulation 1592/2002 article 15. §1.(e) and article 16. §2.</p> <p>In relation with the comment to 21A.20 (e), the wording "determine that no feature or characteristic makes the product unsafe ..." should not be deleted without implementing an equivalent rule, as it is a required condition of the Regulation 1592 for issuance of a type certificate. Deletion of this wording coming in addition to the concept of "no Agency involvement", plus the applicant given privilege, is a deviation from the Basic Regulation.</p>	<p>Not Accepted 21A.33(d) has been deleted because its intent is addressed in other Part-21 paragraphs.</p> <p>(See also response to Comment #15)</p>
86. DGA Defence	B.III Draft Decision "AMC & GM to Part 21" AMC 21A.20 (b)1.1	<p>Technical familiarisation precede the establishment and review of a Certification Programme.</p> <p><u>JUSTIFICATION:</u> It is inconsistent to make the technical familiarisation part of the certification programme, when to review and to approve a certification programme, the Agency specialists need a deep and thorough technical familiarisation. The technical familiarisation activity precede the implementation of the certification programme and therefore cannot be included in the certification programme.</p>	<p>Partially Accepted (See response to Comment #16)</p>
87. DGA Defence	Proposal 12: AMC 21A.20(b)1.1. 3	<p>Determination of the level of confidence of the Agency in the applicant expertise remains unclear although it is the cornerstone for the applicant proposal of Agency's involvement.</p> <p><u>JUSTIFICATION:</u> It is understood from this paragraph that the level of involvement of the Agency will be proposed by the Applicant through the certification programme. It is also understood from the last bullet, one criteria to be used (by the applicant) to identify activities in which Agency will not be involved, is "the level of established confidence with the applicant". It is unclear: does it mean that the applicant will assess on its own, when writing the certification plan, the established level confidence of the Agency with it? It seems difficult to believe in occasion where the applicant will make the recognition that the Agency has a low level of confidence with it.</p> <p>The plan for Agency involvement should not be linked to the certification programme. Proposal with criteria assessment for determination of the Agency's involvement should remain an Agency privilege in order to comply with Regulation 1592.</p>	<p>Partially Accepted (See response to Comment #23)</p>

Comment # /provider	Para	Comment/Justification	Response
88. DGA Defence	GM 21A.20(d) §2.	<p>According to the Guidance Material, a change in the Agency involvement after an identified departure, by the applicant, from the approved Certification Plan, is submitted to the applicant acceptance. This does not comply with the Basic Regulation and the Authority position of the Agency.</p> <p><u>JUSTIFICATION:</u> GM 21A.20(d) Changed Agency involvement §2. : "Following submission of information, the applicant and the Agency may accept a change in the Agency involvement." This wording put the applicant at the same level of decision and Authority than the Agency. It makes understand the Agency give up any mean to mandate a change in her involvement if the applicant does not accept. It is in contradiction with the Regulation 1592.</p>	Partially Accepted (See response to Comment #17)
89. LBA	A.1.	<p>The proposed procedure does not reflect the certification practice. It is a well known experience, especially with small or starting companies, that a close cooperation, witnessing and review of reports and test is necessary and it can not be decided at the beginning of the project.</p> <p>The proposed procedure generates addition administrative effort and potential conflict.</p> <p><u>JUSTIFICATION:</u> Experience with certification projects.</p>	Not Accepted The proposed approach allows close cooperation with starting companies, as DOA privileges are not necessarily fully granted from the start.
90. LBA	Proposal 22, Page 29 GM 21A.263(c)(4)) 2.2. (b)	<p>The proposal is not consistent with Part 21: See Definition Major Change: AMC and GM to Part 21 Subpart D – Changes to type-certificates</p> <p>GM 21A.91 Classification of changes to a type design</p> <p>3.3 Complementary guidance for classification of changes. (v) The change alters the Airworthiness Limitations or the Operating Limitations.</p> <p><u>JUSTIFICATION:</u> According to the definition of a Major Change every change of a limitation has to be considered as major. Therefore, a change of a limitation will not be minor, as mentioned in proposal 22.</p>	Not Accepted The proposed criteria for changes to limitations is within the context of GM 21A.91 (...without altering...)
91. LBA	A. IV. Task 1 A. V. 1. a. Task 1	<p>Proposal: Amend paragraph IV. task 1 to read: "The primary aim of this NPA is to propose changes to Part 21 and its associated Acceptable Means of Compliance/Guidance Material (AMC/GM). It introduces the concept of an approved certification programme to agree on and document the path to achieve certification and to record the level and area of Agency's involvement in any certification activities. Establishment of an approved certification programme will enable the applicant to better plan and resource certification activities and will provide the applicant with greater certainty on the acceptance of the certification process. Safeguards are retained in this proposal to ensure the Agency's involvement where unforeseen conditions arise that may cause a departure from the approved certification programme."</p>	Noted Following comments received, changes have been proposed to better explain the concept of the NPA.

Comment # /provider	Para	Comment/Justification	Response
		<p>Comment: The NPA paragraphs on task 1 do not include the objective to reduce the Agency's level of involvement to less than the level of current practice. Nevertheless, the proposals developed under this task appear to be restricting the Agency's level of involvement. Apparently, some of the NPA proposals are not backed by the task 1 as defined in the NPA. Detailed comment will be filed against subject NPA proposals.</p> <p>Proposal: Amend paragraph V. 1. a. "issues which the NPA is intended to address" for tasks 1 as follows: "...It has therefore been suggested that changes to Part 21 and/or general guidelines (AMC/GM) be produced so that the level of the Agency's involvement can be determined, providing more certainty to the applicant on the certification process and consistency regarding the level of involvement of the Agency."</p> <p><u>JUSTIFICATION:</u> The concept of an approved certification programme is acceptable, but the objectives are challenged.</p> <p>From experience in current certification projects, level and area of Agency's level of involvement may not be „predetermined from the outset" as it is not possible to define the details without enough knowledge of the project in question. A familiarization will be required in any case to define involvement. At least for projects like transport category aeroplanes, the detailed design will not be available until later in the project. I agree, the involvement shall be defined, but it is unreasonable to require that it must be "predetermined from the outset". The proposed rewording of the respective sentence in paragraph IV avoids this unrealistic expectation, keeping the concept.</p> <p>Additional text is proposed for paragraph IV to state that the primary purpose of the certification programme should be to document and agree the scope of the certification exercise in order to control the certification process to achieve certification.</p> <p>It is not obvious how the objective to achieve "greater legal certainty on the acceptance of the compliance documentation" is achieved through the approved certification programme. There is no link between the acceptance of a certification programme and the acceptance of compliance reports. A good certification programme does not guarantee an acceptable quality of the compliance data and compliance reports. In other words, unsatisfactory design elements, areas of marginal compliance or non-compliances may develop despite a perfect certification programme. Therefore, the word "legal" is proposed to be deleted and the objective is shifted towards the acceptance of the process rather acceptance of the reports.</p> <p>The paragraph V. 1. a. "issues which the NPA is intends to address" for task 1 is proposed to be adjusted accordingly.</p>	
92. LBA	A. IV. Task 2 A. VI. 1. a. Task 2	Comment: The need for classification of aircraft flight manual changes on the level of Part 21 regulation is questioned. A particularity of a specific flight manual	Noted The text of the explanatory note is not reproduced in the final

Comment # /provider	Para	Comment/Justification	Response
		<p>or flight manual management concept should not lead to a regulation change that would be meaningless for other flight manual concepts.</p> <p>Proposal: Amend task 2 as follows: "Approval of certain changes to aircraft flight manuals has been a recurrent problem for aircraft where several aircraft flight manuals dedicated to individual operator fleets were established and referenced in the respective TCDS. Privileges extended to a Design Organisation Approval (DOA) holder under 21A.263(c)(4) to approve certain aircraft flight manual changes without the involvement of the Agency are inconsistent with the identification of minor under 21A.91. The guidance material associated with the procedures for the approval of documentary changes to aircraft flight manuals (GM 21A.263(c)(4)) are therefore amended to enhance DOA privileges and to remove this inconsistency."</p> <p>The same text is also proposed for paragraph A. VI. 1. a. (Task 2).</p> <p>Proposal: Replace "minor aircraft flight manual change" by the previous term "documentary change to the aircraft flight manual" throughout the NPA.</p> <p>JUSTIFICATION: Design changes are classified according Part 21.A91. According to established practice, any aircraft flight manual part that is affected by the change is part of the design change itself and the design change is classified including the extent of change to the aircraft flight manual. From many years of experience with aircraft flight manual approval process on the basis of envelope flight manuals, there is hardly any situation that would result in a need for an aircraft flight manual change without any underlying technical background. It is not in line with the design change process and not useful to separate the aircraft flight manual change from the other elements of the design change.</p> <p>From my experience, the inconsistency described in the Regulatory Impact Assessment for task 2 on the NPA possibly results from an unfavourable concept of the aircraft flight manual of specific aircraft types. The concept of minor aircraft flight manual changes seems to be heavily influenced by the way how some aircraft flight manuals of foreign manufacturers were established and managed. There are cases, where for individual operator fleets as a subset of the aircraft type, dedicated aircraft flight manual documents were created and referenced in the TCDS reflecting the individual operator's aircraft definition. When e.g., a type design change was approved on the respective aircraft type, this could generate the need to revise one or more operator aircraft flight manuals to reflect the same change.</p> <p>For the major transport aeroplane manufacturers in Europe, the concept of an envelope aircraft flight manual is widely used. That means, that all approved design variants available for the aircraft type form part of an envelope aircraft flight manual. The aircraft flight manuals of the individual aircraft are compiled by a selection of the relevant information as a subset of the envelope aircraft flight manual. This process is</p>	published text.

Comment # /provider	Para	Comment/Justification	Response
		<p>commonly called customisation. The customisation does not constitute a design change and therefore the revision of individual or operator fleet aircraft flight manuals is not subject of a type certification process. With the use of envelope aircraft flight manuals, the process of approving minor aircraft flight manual changes as proposed in the NPA would not be needed and no classification would be needed. Writing aircraft flight manuals in the form of envelope aircraft flight manuals is therefore the more appropriate and preferred way.</p> <p>Therefore, the "recurrent problem" of approving minor aircraft flight manual changes as explained in the NPA explanatory note is not an inconsistency within Part 21. The inconsistency should therefore not be resolved by introducing regulatory text in Part 21. Introducing regulation specific for the configuration management of the fleets through aircraft flight manual revisions with the associated problem of classification could be seen as a manifestation that this concept was the only one recognised or preferred by the Agency. This consequence would not be supported as there are other concepts of aircraft flight manual that are more appropriate.</p> <p>Instead, it is proposed to make specific arrangements on project level with the applicants for any aircraft type applying such an unfavourable aircraft flight manual concept. With acceptable procedures in place, the approval of aircraft flight manual changes for the purpose of customisation could be delegated to the respective applicant under the privilege to approve documentary changes to the aircraft flight manual. To not cause confusion with the "minor" term of 21A.91 the term "minor aircraft flight manual change" should be replaced by the previous term "documentary change to the aircraft flight manual" throughout the NPA.</p> <p>The proposal to limit task 2 to the level of AMC/GM and amend it accordingly to address the scope of the issue as explained above would provide sufficient means to address the perceived problem satisfactorily.</p> <p>The proposal to amend GM to 21A.263 is filed separately, attached to my comment on NPA proposal 22.</p>	
93. DGAC-F	V RIA, § 4 option 1	<p>The sentence "uncertainties regarding acceptance by the Agency of compliance documentation would remain" should be explained and modified.</p> <p><u>JUSTIFICATION:</u> If a document presented by the applicant contains incorrect statements, errors or does not show compliance with the certification basis, it should not be accepted by the agency. The above noted sentence seems to indicate that it is proposed that reports should be accepted whatever their quality is.</p> <p>This is not in favour of safety and negates the role of the agency as a certifying authority which is supposed to provide an external check of the validity of the demonstration of compliance (see current 21A.33 (d)).</p> <p>An authority shall only issue an approval when any</p>	<p>Noted (See response to Comment #77)</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>compliance documentation is found satisfactory acceptable and the applicant has corrected all identified deficiencies, whatever consequences are (delay and cost).</p> <p>A similar questionable sentence "establishment of certification programme will provide the applicant with greater legal certainty on the acceptance of compliance documents" is found in paragraph IV (task 1).</p>	
94. DGAC-F	V RIA, §4 Option 3	<p>The economic impact of this option is limited to a very subjective statement "Potentially provides the greatest economic saving to industry". There is no explanation of this statement. To identify these savings is difficult because in all circumstances the applicant must demonstrate compliance with all of the certification basis. The number of checks performed by the agency would not change this fact.</p> <p>It is suggested that there is a correlation between the weakness of the authority and a low safety level : one should refer to arguments behind the discussion on ICAO SOAP, SAFA programmes or on EU black list. In particular, one single accident could compromise this "economic impact" analysis.</p> <p>JUSTIFICATION: Self explanatory.</p>	Noted
95. DGAC-F	V RIA, §4 .Option 4	<p>Some "economic savings" are suggested, but none is explicit or is justified.</p> <p>If such savings are related to the level of verification of the Agency, their amount can be seen detrimental to safety in a reverse relation (see V.4.a.1, option 3) Agency verification can be seen as an additional safety barrier in the Reason's model.</p> <p>JUSTIFICATION: Self explanatory.</p>	Noted
96. DGAC-F	V RIA, § 4 option 3	<p>The Regulatory Impact Assessment is overly considered as "negative".</p> <p>JUSTIFICATION: The argument of a good experience with gliders in one country in order to eventually justify the loss of agency's oversight of aircraft such as the Airbus A380 is really controversial. The number of potentially endangered passengers is not in same order of magnitude. Very complex aircraft development is submitted to strong commercial pressure to keep on time the certification dates and is subject to overlooking of problems simply because of the enormous amount of work to be performed. This is the main benefit provided by competent authority, independently of costs, delays, out of any pressure.</p> <p>Furthermore, UK may not be "State of design" for UK registered gliders: therefore continued airworthiness and safety level of UK registered gliders were also ensured by the corresponding states of design authorities.</p>	Noted
97. DGAC-F	V, 4, Paragraph a.,	Safety impact is considered as negative safety impact, if direct involvement of the Agency is	Noted See general explanations, in IV

Comment # /provider	Para	Comment/Justification	Response
	sub-§ i	<p>(significantly) reduced.</p> <p>JUSTIFICATION: Up to now current working practices have shown that authority's involvement have kept incidents and accidents to a level consistent with regulation and 1309 like requirements. When accidents occur and are too frequent, public acceptance decreases and confidence in aviation as a safe means of transportation is challenged. The Authority have already taken into account applicants DOA privileges and Current part 21 is more flexible than JAR 21 on some areas and has only been applied for a few years.</p> <p>Interference of financial or program delay considerations with design decisions affecting safety may jeopardize the current good certification practices without the Authority being aware. Even mandatory continued airworthiness actions cost a lot of money and are detrimental to the applicant image, so there is a tendency to keep authority out of the loop.</p> <p>Further reduction of the authority verification has a negative impact on the current achieved level of safety.</p>	above.
98. DGAC-F	Part V "Regulatory Impact Assessment (Task 1)" Chapter 4 "Impacts" Paragraph a. "All identified impacts" i. "Safety" – option 4	<p>DGAC France is a bit surprised by the agency stating that option 4 would enable the agency to focus limited resources on most important necessary areas: All stakeholders would expect that the agency is already managing as good as possible its current resources to allocate them to urgent and important tasks, isn't it?</p> <p>JUSTIFICATION: How the approved certification programme "will enable the Agency to focus limited resources on areas where there are perceived weaknesses"? There is subjectivity in the word "perceived" weaknesses and most of weaknesses of a given design are only identified late during certification compliance findings review and checks so the authority can take appropriate decision. If all applicants and authority had a kind of "crystal ball" to identify such weaknesses, be sure that they would not exist, because it is first the responsibility of the applicant to find the best design and minimize any continued airworthiness issues burden and costs.</p> <p>Of course, DGAC France supports the concept of best usage of agency resources to critical safety tasks.</p> <p>If the agency reduces its direct exposure to projects through involvement in compliance findings review and documentation analysis, then the agency will also lose its ability to reuse experience to further be technically competent in the most critical safety areas. This aim of the agency to protect European citizens would not be achieved.</p>	Noted
99. DGAC-F	V RIA, § 4 option 4	<p>In the referenced paragraph, we find the following statement "<i>Provisions are made in this proposal to enable enhanced Agency involvement if unexpected conditions arise during the certification programme</i>".</p> <p>This statement seems not to be implemented with</p>	Noted (See response to Comment #17)

Comment # /provider	Para	Comment/Justification	Response
		<p>certainty. There is some uncertainty in the proposal when the proposed GM 21A.20 (d), §2 indicates that <i>"the applicant may accept a change in the Agency involvement"</i> which clearly means the applicant <i>"may NOT accept a change in the Agency involvement"</i> and the "acceptance" is not the standard practice. This would definitely negate EASA's authority : such a lack of authority would not be in favour of safety.</p> <p><u>JUSTIFICATION:</u> Self explanatory.</p>	
100. DGAC-F	V - § 5, a option 4 and c	<p>The following argument in paragraph a: <i>"Safety will be assured by initially basing the approved certification programme on the level of the applicant's expertise and Agency's confidence in their ability to design and certificate a product"</i> and the similar one in paragraph c : <i>"Safety is maintained by ensuring that Agency involvement is established based on the level of confidence with the applicant, taking into account their capability and experience"</i> are highly questionable and shall be removed.</p> <p><u>JUSTIFICATION:</u> The compliance with a certification basis is intended to ensure that the product is capable of a minimum safety level. A certification basis is evolving with time to take into account past experience of occurred issues. Experience from failures from any system of any applicant may be helpful to prevent further issues and that is how modifications to certification basis are initiated. The airworthiness codes published by the authorities represent the state of the art of rules that are necessary to ensure safety. Indeed, the applicant must demonstrate compliance with all requirements of the certification basis (21A.20 (a)) : this does not depend upon its level of expertise. Safety is not assured on the applicant's level of expertise and on agency's confidence in its ability.</p>	Accepted (See response to comment #18)
101. DGAC-F	Part V, Chapter 5 , Paragraph c	<p>Option 4 with a lack of involvement</p> <p><u>JUSTIFICATION:</u> Indeed, whatever the level of expertise, an applicant will not be able to assure good standardisation of interpretations between manufacturers, due to the confidentiality of detailed design information. In case of reduced agency involvement, numerous inconsistencies in the application of airworthiness requirements would necessarily result, along with a loss of expertise of Agency personnel. For purpose of standardisation, Option 2 appears much more efficient in assuring a satisfactory uniform level of safety.</p> <p>A lack of involvement of the Authority quickly results in divergent interpretations of requirements or compliance methods. As stated in article 2 of CE1592/2002, the objective is to maintain a high uniform level of civil aviation safety.</p>	Noted See general explanations, in Section IV and V above.
102. DGAC-F	Paragraph a.	<p>In Option 4, DGAC France is surprised to note that the authority involvement is only "predetermined on the basis of the competence and experience demonstrated by the applicant" and does not reflect current safety proven practice where involvement takes more into account the product itself, its</p>	Noted See general explanations, in Section IV and V above.

Comment # /provider	Para	Comment/Justification	Response
		<p>complexity, the built of years of incidents and accidents assessment to avoid similar events occur again.</p> <p><u>JUSTIFICATION:</u> During past working practices with major DOA holders, DGAC France has recognized applicants competence, but has not based its involvement only on such competence of the applicant. There has been a need</p> <ul style="list-style-type: none"> - Of each product and changes overview, as primary certification authority, in order to be in a position to answer technical questions from foreign authorities and avoid duplication of work to the applicant and minimize for others validation activities. - Of assessment of various complex design toward new requirements or new interpretations: elaboration of special conditions needs a great knowledge of past regulations and past issues. - Of deep involvement in design knowledge in order to assess to assess and confidently approve limitations, procedures or performance information included in Aircraft Flight Manuals - Of deep knowledge of all applicants design in order to challenge all of them and assess if some unsafe conditions remain even if the product is compliant to all certification specification. - To keep pressure on the applicant to justify all compliance findings under the pressure of management constraints of programme cost and delays. - To verify the applicant continue to meet its competence and respects approved procedures. - To keep authority competence to be able to perform duties linked to continued airworthiness mandatory information. <p>The level of involvement can vary and the number of samplings can change id confidence is built and kept at a high level.</p> <p>Level of authority sampling implication is not dependant only on the competence and experience of an applicant. And it can change in a negative way, so involvement is increased.</p> <p>Also, one single applicant does not have knowledge of issues found by other applicants. The authority has that experience.</p>	
103. DGAC-F	Proposal 1 : 21A.20(b)	<ol style="list-style-type: none"> 1. subparagraph (b) should mention that the certification programme addresses all items of the applicable type-certification basis and environmental protection requirements 2. Delete subparagraph (b) 3 <p><u>JUSTIFICATION:</u> 1. (b) refers to means of compliance but does not indicate to what compliance is shown. 2. The task of an authority is to protect all the citizens. Of course, doing so, the relation with the applicants shall remain good, but the applicant shall not be given any power of determining the authority's activities or restricting them. This is against the principle of freedom for the agency to take action to protect citizens. The level of verifications the agency intends to perform is a decision to be made by the</p>	<p>Noted 21A.20 has been simplified and details left in AMC 21A.20(b)</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>authority itself. It can consult for the applicant's advice, but eventually makes the decision.</p> <p>Consequently, the proposed 21A.20 (b)(3) ("<i>The applicant shall propose a certification programme... detailing ... the involvement of the Agency</i>") is not acceptable at all because it gives an undue power to the applicant, then compromising the agency independence, even if one can say the programme must be approved by the agency. This might notably be problematic when there is a need for further investigation which had not been previously been introduced in that certification programme. Furthermore, with deletion of 21A.33 (d) and 21A.257 (b), the agency has no longer any right to "add" items because the proposal must come from the applicant. See also the separate comment on the use of the word "involvement".</p>	
104. DGAC-F	Proposal 1 : 21A.20(d)	<p>Modify proposed text as follows:</p> <p>"(d) Where conditions arise that may cause a departure from the approved certification programme established in paragraph (b), the applicant shall provide whatever additional information is requested and allow, where necessary, changed Agency involvement in the compliance demonstration activities. The certification programme shall be updated accordingly and approved by the Agency."</p> <p><u>JUSTIFICATION:</u> See comment 2 to 21A20(b)</p>	<p>Partially Accepted</p> <p>21A.20(d) has been deleted. Agency verification of compliance findings is covered in the new 21A.38.</p>
105. DGAC-F	Proposal 1 : 21A.20 (e)	<p>Modify the paragraph as follows:</p> <p>(e) The applicant shall for all the applicable type-certification basis and environmental protection requirements,</p> <ol style="list-style-type: none"> 1. declare that it has shown compliance according to the approved certification programme established under paragraph (b), or 2. identify any airworthiness provisions eventually not complied with according to 21.A.21(c).2. <p><u>JUSTIFICATION:</u> This subparagraph (e) requires the applicant to declare compliance with the certification basis when Part 21 itself recognises that this is not always possible (see 21A.21 (c)(2) "<i>Any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety</i>"). Consequently, when the applicant makes use of 21A.21 (c)(2), full compliance with all type certification basis is not strictly achieved.</p> <p>There should be also a modification of Part 21 by adding a "OR" statement between 21.A.21(c).1 and 21.A.21(c).2 requirements.</p>	<p>Not Accepted</p> <p>When use of 21A.21(c)(2) is made by the applicant, it will be documented in the certification programme. The text of 21A.20(e) can address such situations.</p>
106. DGAC-F	Proposal 1 : former 21A.20 (c)	<p>Deletion of this sub-paragraph is supported.</p> <p><u>JUSTIFICATION:</u> It is considered that 21A.20 is not the appropriate place for discussing the privileges of the DOA holder: all applicants should be submitted to the same general, not discriminatory, rules in 21A.20.</p>	<p>Noted</p>

Comment # /provider	Para	Comment/Justification	Response
107. DGAC-F	Proposal 3 : 21A.33 (a)	<p>Do not change current 21.A.33(a).</p> <p>JUSTIFICATION: The NPA proposes to replace a very clear requirement which is fully in line with 21A.20 (a) by a requirement that adds uncertainty to the compliance findings: Indeed by adding "where identified as means of compliance" it is limiting the investigations and tests to those expected as necessary in the test programme 21.A.20(b). This is assuming the world is perfect and everything would work as expected. But in case the means of compliance (MOC) identified in 21.A20(b) is not adequate after the test results are available (see example below), it would become difficult for the authority to ask for an other means of compliance more efficient.</p> <p>This 21.A.33 paragraph dealing with investigation and tests is to ask the applicant to show compliance to all applicable requirements, whatever the MOC are to be taken to show the compliance, to the satisfactory of the authority. It is not to just perform investigation and tests according to the MOC identified in 21.A20(b).</p> <p>The NPA change is not at all supported and it is suggested to keep the current 21A.33 (a). The applicant is fully responsible for demonstrating compliance with the certification basis and the environmental protection requirements (21A.20 (a)) and must do all necessary tests and inspections to achieve this (21A.33 (a)) !</p> <p>Example: structural major change: means of compliance is computation. Results show residual strength margin too low (with uncertainties in the area of modification.) Based on results, the agency shall ask for a test MOC in the area, too complex to be modelised for computation. 21.A.33(a) would then be the reference to ask for a compliance finding by test, whereas the certification program may have been approved with "analysis" MOC.</p>	Accepted
108. DGAC-F	Proposal 3 : 21A.33 (c)	<p>- Proposed change is not supported. - Improve current 21.A.33(c) as follows:</p> <p>21A.33 (c) The applicant shall <u>allow support</u> the agency to make any inspection <u>investigation</u> necessary to check compliance with paragraph (b).</p> <p>JUSTIFICATION: The purpose of 21.A.33(c) is to verify the conditions of test activities: to be sure the specimen under test is representative to be sure the test machine is calibrated...</p> <p>The certification program will never go the level of details to describe HOW a particular means of compliance by test is performed. This is level of details close to "production" activities and that could be checked by a local expert or can be reviewed on paper at the level of test plan and test report.</p> <p>The reference to 21.A.20(b) does not help and shall not be introduced.</p>	Not accepted Agency verification of compliance findings is addressed in 21A.38.
109. DGAC-F	Proposal 3 : Former 21A.33 (d),	<p>- Deletion of 21.A.33 (d) is not supported at all. - Change of 21.A.33 (e) is not supported. - Title change of 21.A.33 is not supported.</p>	Not accepted The new concept defined for Agency verification of compliance

Comment # /provider	Para	Comment/Justification	Response
	<p>proposed to be deleted by the NPA, and new 21A.33 (d) Title of 21A.33</p>	<p>Investigation and tests shall be kept.</p> <p>The deletion of the paragraph (d) is questionable for the following reasons :</p> <p>1 - Under 21A.21 (c)(3), the Agency must be convinced that there is no unsafe feature or characteristic. How can this be done if the EASA is no longer allowed to check the situation because of the deletion of the former 21A.33 (d) ?</p> <p>2 - Deletion of former 21A.33 (d) leaves the proposed (d) orphan from any other text : what are then these "tests performed or witnessed by the Agency" ?.</p> <p>3 - Deletion of this paragraph is not consistent with the fact that 21A.35 is not changed at all by this NPA : there is no logic in giving the applicant the authority of determining the Agency's involvement (21A.20) and in leaving in 21A.35 a total arbitrary decision to the Agency in "all flight tests that the Agency finds necessary".</p> <p>4 - Some of the applicants to type certificates are not required to apply for a DOA (see 21A.14 (b)). Therefore, for such applicants, the former 21A.33 (d) is necessary.</p>	<p>findings requires simplification of 21A.33, to avoid duplication of requirements.</p>
<p>110. DGAC-F</p>	<p>Proposals 4 and 6 : 21A.97 and 21A.114 Proposals 16 and 17 : AMC to 21A.97 and AMC to 21A.114</p>	<p>Changes to 21A.97 and AMC 21.A97 are not supported. However, an improvement to current 21.A.97 is proposed to introduce the certification programme. Consequently, 21A.97 could read as follows:</p> <p>21A.97 Major changes</p> <p>(a) An applicant for approval of a major change shall:</p> <p>1. Prepare <u>Submit to the agency</u> substantiating data together with any necessary descriptive data for inclusion in the type design;</p> <p>2. Show that the changed product complies with the applicable certification specifications and environmental protection requirements, as specified in 21A.101, <u>and shall record and keep available to the Agency all elements of the demonstration of compliance.</u></p> <p>3. <u>Propose a certification programme detailing for all the applicable certification specifications and environmental protection requirements,</u> i. <u>the means of compliance with the applicable certification specifications and environmental protection requirements; and</u> ii. <u>the compliance documentation structure.</u> <u>This programme shall be approved by the agency and jointly updated as necessary. It may be provided at the time of major change approval with other documents in case of an urgent change to be processed.</u></p> <p>4. <u>for all the applicable certification specifications and environmental protection requirements,</u> i. declare that it has shown compliance with the applicable certification specifications and environmental protection requirements <u>according to the certification programme established under 3, or</u> ii. identify any airworthiness provisions eventually</p>	<p>Not Accepted The solution proposed is equivalent to the current proposal, referring to 21A.20, with the detailed guidance developed in AMC 21A.97.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p><u>not complied with.</u></p> <p>5. Comply with 21A.33 and, where applicable, 21A.35.</p> <p><u>Similar modifications shall be done to 21.A.114.</u></p> <p>JUSTIFICATION: The proposed 21A.97 (a) is completely changing the economy of the process. It adds cost and administrative burden via the formal step of the 21.A20 certification programme.</p> <p>Indeed, for most of major changes, the applicant is giving to its authority a complete package comprising <u>altogether</u> the determination of the certification basis and the demonstration of compliance. This process is well described in former 21A.97 (a). All parties benefit from the "simplified" process which is less documentation and saves time when it is urgent to process a last minute major change that was not identified a long time in advance. Then only the "big" or "well planed" major changes would need to go through the full process of 21A.20. (as currently done)</p> <p>This increase in cost and burden for both the industry and the Agency of the added burden 21.A.20 for everyone (similar comment for proposal 6) is not addressed in the impact assessment.</p> <p>However, when reading the justification for the proposal 16 (and similarly 17), it appears that the issue has been identified under the words "<u>long and heavy certification process</u>" and "<u>will not be practical</u>" by the agency.</p> <p>It explains then why the agency tries to alleviate this burden by adding proposal 16 and 17.</p> <p>This way of proceeding is not acceptable at all. First, the RIA is obviously not fair and accurate ! Second, from a legal point of view, how can the agency propose a more costly and burdensome binding Part 21 rule opinion to the commission and decide alleviation by means of non-binding agency's measures at AMC level? It is contrary to CE1592/2002 goals and powers given to the Agency and is not acceptable.</p>	
<p>111. DGAC-F</p>	<p>Proposal 7 : 21A.115 b</p>	<p>Modify proposed 21.A.115 (b) as follows:</p> <p>(b) Approval of a supplemental type-certificate is limited <u>to that specific configuration(s) in the type design upon which the STC is made.</u>in accordance with 21A.97(b).</p> <p>JUSTIFICATION: The intent of making sub-part E (STC) and 21A.115 independent of sub-part D (TC) is supported.</p> <p>But why is there a new cross-reference to 21A.97 (c) added in the proposed 21A.115 (b) ? This is not consistent with the declared intent.</p> <p>The appropriate words from 21A.97 should be imported into 21A.115 instead of that cross-reference.</p>	<p>Partially Accepted Proposed text is re-worded to read as follows:</p> <p>(b) <i>Approval of a supplemental type-certificate is limited to that or those specific configuration(s) of the product upon which the change is made.</i></p>

Comment # /provider	Para	Comment/Justification	Response
112. DGAC-F	Proposal 8 : 21A.257 b	<p>proposed change is not supported.</p> <p>JUSTIFICATION: The deletion of former 21A.257 (b) is not supported because this paragraph is within part 21, subpart J DOA. The NPA in its justification says the removal was justified by duplication with new 21A20b. This referred paragraph only applies to TC holders! So there is no duplication in fact.</p> <p>This is consistent with the need to keep as is 21.A.263b. This is current practise with proven efficiency in terms of safety and it shall not be changed now.</p> <p>See also comment to 21.A.33(d)</p>	<p>Partially Accepted The content of 21A.257(b) has been included in the revised paragraph.</p>
113. DGAC-F	Proposal 9 : 21A.263 (b)	<p>Changes to 21.A.263 b are not supported.</p> <p>JUSTIFICATION: The wording of 21.A.263b in relation with 21.A257(b) serves the purpose to give privileges to the applicant while the authority can still check compliance findings as needed. This balanced situation has proven efficiency in terms of safety and to modify it should be done with careful steps and precautions. It is probably not the time to modify those articles, based on the fact that the agency has not achieved its staffing plan.</p> <p>See also general comment on Agency's "involvement"</p>	<p>Partially Accepted The text has been changed to directly refer to 21A.38.</p>
114. DGAC-F	Proposal 10 : 21A.433 (a)(2)	<p>The proposed change is not supported.</p> <p>JUSTIFICATION: The proposed text is out of place : privileges of DOA holders should be uniquely dealt with in subpart J and this 21A.433 should be general, non discriminatory, because it is applicable to all applicants, DOA holders or not.</p> <p>It should also be noted that the proposed 21A.433 (a)(2) refers to 21A.263 (b) which itself refers to 21A.20 which, by referring uniquely to applicants for type-certificate or restricted TC, is de facto not applicable to repairs performed by a third party. Consequently, these references would not be appropriate.</p>	<p>Not Accepted The "if applicable" recognises that this applies to non-DOA holders. The link between 21A.263(b) and 21A.20 no longer exists.</p>
115. DGAC-F	Proposal 12 : AMC to 21A.20 (b)	<p>1) in 1.1.1 reference to " equivalent safety findings" should be deleted</p> <p>2) 1.1.3 should be modified to refer to Agency's check rather than "involvement" and changed to a GM to 21.A.33(d) informing the applicant on the criteria that the Agency will normally use to decide to check compliance findings</p> <p>JUSTIFICATION: 1) Within the paragraph 1.1.1, the certification plan cannot include the equivalent safety findings. This is not consistent with part 21A17 and 21A.21 paragraph. Indeed the certification basis as described in 21A.17 (and counterpart 21.A.18 for environmental protection requirements) describes the basis as the applicable airworthiness code AND any special conditions. Once the project is close to completion and tests are</p>	<p>Partially Accepted The certification programme is meant as a living tool.</p> <p>The intent of AMC 21A.20(b) 1.1.3 is moved to AMC 21A.38.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>performed, difficulties to comply to some requirements can be identified. Then the product will comply to the certification basis as per 21.A.21(c)1 and those requirements that cannot be complied with are proposed to be addressed by an equivalent safety finding (21.A.21 (c)2. The agency may <u>accept</u> or <u>refuse</u> such an ESF or may enter a process with the applicant to modify the ESF and the design to an acceptable <u>compromise</u>.</p> <p>If before development, at certification application, the applicant was identifying an applicable requirement he does not want to comply with, he shall ask for an exemption to that requirement. It cannot be equivalent safety findings.</p> <p>Therefore, the "equivalent safety findings" shall be removed from the certification programme.</p> <p>See also comments on 21.A.20(e)</p> <p>2) See comments on 21.A.20 and 21.A.33</p>	
116. DGAC-F	Proposal 21 : AMC to 21A.263 (b)	<p>This AMC should be revised, once agreement is achieved on the paragraph 21.A.263b it documents.</p> <p>JUSTIFICATION: consistency with other comments.</p> <p>Notwithstanding the comments already made on the wording "agency involvement", it is noted that, contrary to the conclusion of the RIA, indicating that the proposal is based on option 4, paragraph (2) of this AMC to 21A.263 (b) reflects option 3.</p>	<p>Noted Following comments received and re-drafting, the AMC has been deleted.</p>
117. DGAC-F	Proposal 23 : AMC to 21A.433	<p>This AMC should be deleted.</p> <p>JUSTIFICATION: The link between this AMC text and the NPA proposed wording for 21A.433 (a)(2) cannot be identified. Indeed, in the proposed 21A.433 there is no reference to "agency level of involvement".</p> <p>It is also noted that the justification of this proposal states that "<i>an approved certification programme in advance will not be practical</i>" But nowhere in 21A.433 there is such a reference to an approved certification programme.</p> <p>As already stated, the justification "an AMC is proposed to provide for a simplified mechanism" looks like an exemption from a "1702 regulation" binding rule by means of an agency's non binding measure.</p> <p>See also comment on 21.A.433</p>	<p>Accepted Agency verification of compliance findings is now defined in 21A.38.</p>
118. DGAC-F	Proposal 14 : GM 21A.20 (d)	<p>1) Title should be changed to "Changes to the certification programme" 2) Delete paragraph 2</p> <p>JUSTIFICATION: See comments to 21.A.20 and 21.A.33</p>	<p>Partially Accepted GM is deleted and moved to AMC 21A.38.</p>
119. DGAC-F	Proposal 15 : GM 21A.20 (e)	<p>This GM should be deleted.</p> <p>JUSTIFICATION: This text is not useful because it is extremely open and is legally curious. Part 21, binding rule, imposes a declaration of compliance by the applicant with no involvement of the agency in that declaration; this</p>	<p>Partially Accepted Text is reworded.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>GM, not binding agency's measure, would allow a false statement to be issued with the agency's agreement.</p> <p>Based on our other comments, this GM should be deleted for consistency.</p>	
120. DGAC-F	Proposal 16 : AMC to 21A.97	<p>Delete</p> <p><u>JUSTIFICATION:</u> this proposal, although intended to propose a simplified format, is only a mitigation of the increased burden for the applicant and the agency when compared to current practice. See comment on 21A.97.</p>	Not Accepted (See response to Comment #110)
121. DGAC-F	General	<p>One of the main proposals of this NPA is to introduce in Part 21 the use of a certification programme.</p> <p>DGAC France agrees to introduce this normal practise in the Part 21 to mandate its use for the applicants to a certification as long as it does not go further than the current practise.</p> <p><u>JUSTIFICATION:</u> For years before the existence of EASA, certification programmes had been commonly used : simply because managing a certification process would be difficult without having ... a certification programme in place.</p> <p>For EASA, the use of a certification programme has been imposed to the agency staff by article 8 of the Management Board Decision n° 7-2004 "products certification procedure", dated 30 March 2004.</p> <p>It is noted that this NPA seems to ignore the existence of this basic practice when it states : "it introduces the concept of an approved certification programme", in explanatory note, § IV task 1, although certification programmes have commonly been used to identify the certification activities and the level of checking by the authority when the applicants holds a DOA.</p>	Noted
122. DGAC-F	General	<p>Instead of mentioning "agency involvement in compliance findings" the NPA should refer to "agency verification of compliance findings".</p> <p><u>JUSTIFICATION:</u> In many places in the NPA, we find references to the agency's involvement in the demonstration of compliance, the most significant occurrence being: "<i>involvement of the Agency in the compliance demonstration activities</i>" within NPA proposed paragraph 21A.20 (b)(3).</p> <p>Currently, Part 21 is clear :</p> <p>(1) The applicant is fully responsible for demonstrating compliance with the certification basis and the environmental protection requirements (See 21A.20 (a)).</p> <p>(2) The role of the authority is to check the validity of elements provided by the applicant to support the demonstration of compliance. (See 21A.33 (d)). Therefore the authority can built confidence on the applicant's competence.</p> <p>The wording "involvement" is not appropriate and</p>	Accepted

Comment # /provider	Para	Comment/Justification	Response
		confusing responsibilities. The task of the agency is not to perform any compliance findings with the applicants but only to verify the applicant has perform all compliance findings necessary to show his product complies with all applicable requirements.	
123. British Airways	Proposal 23	<p>Proposal 23 Comment: It is not clear if this proposal replaces the existing AMC21A.433 or is in addition to the existing AMC 21A.433. Please clarify.</p> <p><u>JUSTIFICATION:</u> Clarification required</p>	<p>Noted The AMC is deleted. (See response to Comment #114)</p>
124. British Airways	21A.97. (a) 2	<p>Comment: The proposal requires the applicant to Demonstrate compliance with the applicable certification and environmental protection requirements in accordance with 21A.20(b), (c),(d) and (e). Paragraph 1 requires the applicant to Show that the changed product complies with applicable certification specifications and environmental protection requirements, as specified in 21A.101. Para's 1 & 2 appear to be making the same requirement. Please clarify.</p> <p><u>JUSTIFICATION:</u> Clarification required</p>	<p>Not Accepted Paragraph 1 requires the applicant to demonstrate that the changed product complies with the applicable certification specifications and environmental requirements as specified in 21A.101. Paragraph 2 requires that demonstration to take the form of a defined certification programme with pre-determined means of compliance, compliance check list, etc.</p>
125. Pilatus Aircraft Ltd	General	The proposal is supported by PILATUS.	Noted
126. ESMA	General	<p>The proposed changes to Part 21 regarding the introduction of formalised certification programmes (CP) to clarify the extend of EASA involvement during certification and regarding added privileges for DOA holders to make small changes in the manuals are considered as suitable and acceptable modifications by the European sailplane manufacturers.</p> <p>Nevertheless some comments have to be made:</p> <p>1. The introduction of formalised CP which have to be approved by EASA needs some clarification: Will start of certification tasks only be possible after this approval? It must not happen that only after approval of a quite formalised CP the certification tasks may be begun. (In some cases especially with simple tasks on simple products the applicant might prefer to send to EASA the completed documentation together with the EASA application form without any additional CP, e.g. a change resulting into a service bulletin). Additionally it must remain possible to conduct certification between applicant and authorities (EASA) without a formalised CP – in such a case the involvement of EASA will consequently be deeper and direct coupled to the process of certification.</p> <p>2. It is understood that all changes regarding CPs are only valid for DOA holder. As most sailplane manufacturers are working under alternative procedures some clarification would be helpful for certification tasks without having a DOA. Essentially for such tasks a CP is already the normal way as any task has to be coordinated with EASA anyway due to the lack of privileges when working</p>	<p>1. Noted To maintain the Agency's role of providing safety oversight, the CP is no longer directly approved by the Agency. For complex projects, the CP will be agreed at the beginning, at least in an initial stage (see AMC 21A.20(b), 1.2) and certification tasks can start then; for simple s, the CP could be proposed with the application (see AMC 21A.20(b), 1.3 and also AMC 21A.97, 2), with all proposed activities. A CP will always be required, but it will be accepted to have it in a simple form.</p> <p>2. Not Accepted The requirement to submit a CP is in 21A.20 and is valid for all applicants. This is also required today under Alternative Procedures (see current AMC 21A.14(b), 2.1).</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>under alternative procedures instead under DOA rules.</p> <p>3. The CP will enable EASA to handle tasks different according to the qualification and experience level of the DOA holder. The more qualified/experienced he is concerning the proposed certification task the less involvement from EASA might be possible.</p> <p>This flexible and adapted procedure will possibly enable less EASA involvement in those cases where industry is already very well positioned to handle the task alone and under own responsibility. On the other side it will be also better possible to handle less qualified and/or new organisations – here EASA involvement might be needed in extremis for every single proof of compliance.</p> <p>Actually this is exactly the way certification has been handled between some sailplane manufacturers and national aviation authorities in the past. If agreed upon by both sides full verification of all airworthiness standards was made by the authority – if agreed otherwise the design organisation only gave a summary of the demonstration of compliance and a statement of fulfilling all requirements. This variety must not get lost in favour of a formalised approval procedure for a CP.</p> <p>4. Therefore it is proposed to use the introduction of approved CPs also to lower the hurdles for small design organisations to become the DOA. Due to the process of CP approval even a quite simple and “low-tech” design organisation will be able to perform the proposed certification tasks without the problem that EASA or this DOA holder later in the process are surprised by an unexpected level of EASA involvement (be it high or low).</p> <p>5. As small design organisations do generally not maintain a specialised unit for document control it must be possible to agree upon a CP which lists the relevant tasks but does not yet show a complete list of all certification documents to be completed within the process. If further (or less) documents might be needed this must not automatically lead to a revision of the approved CP.</p> <p>6. Design, development and tests very often include tasks which are hard to predict time wise. Therefore it must be possible to agree upon a CP which lists the relevant tasks but does not yet show a complete time schedule. Of course the succession of important “milestones” within the certification process might be included but a delay must not automatically lead to a revision of the approved CP.</p> <p>7. Nothing is said about the persons/offices within EASA who will approve the CP. The experience of the sailplane manufacturers is that such a scheme will only work effective if the CP is been discussed and approved by the certification managers who will also oversee the actual certification tasks later on. If this approval will be made by persons not directly involved in the certification and not familiar with the</p>	<p>3. Noted (Reference should also be made to NPA 2008-07 which is proposing a new regulatory environment for light sport aircraft)</p> <p>4. Noted</p> <p>5. Noted At the end, the CP will have to be a complete. Some provisions could be introduced in the alternative procedures to DOA to address specific situations.</p> <p>6. Accepted See AMC 21A.20(b), 1.2.</p> <p>7. Accepted This will be addressed in EASA Internal Procedures.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>product additional friction and administrative burden will be the result.</p> <p>This compares to the fact that the approval of the manuals for design organisations working under alternative procedures also deal with some details regarding the design / certification tasks of the products under development. In such cases regularly difficulties have surfaced during the approval process of the organisation as the involved EASA managers had not the inside knowledge of that particular product range. (Experience by the sailplane manufacturers.)</p> <p>8. Regarding obtaining DOA for small and very small organisations some additional comments might be interesting. As this is outside the direct scope of NPA 16-2006 we herewith refer to our letter dated 29.11.2006 which already has been sent after the "Future of DOA" workshop of EASA. Regarding certification of simple products by small organisations we feel that this letter might offer some useful thoughts and proposals. This letter will be sent together with this comment form to EASA (file easa_FofDOA_061129.pdf) and might be discussed also within the 21.024a rulemaking group.</p> <p>9. Regarding the proposal to add the privilege of approving minor changes to aircraft flight manuals the European sailplane manufacturers do agree - this will help to lessen effort on both sides (EASA and industry).</p> <p>JUSTIFICATION: The European sailplane manufacturers do concur in principle to the proposals included in NPA 16-2006. Nevertheless some additional comments (as given above) seem to be important to widen the perspective also to small and very small design organisations and their special problems.</p> <p>As the 21.024a rulemaking group composition reflects besides authorities only rather big design organisations it is hoped that these inputs will be reflected in the final draft of the proposed changes.</p>	<p>8. Noted (Reference should also be made to EASA rulemaking task MDM.032 and to NPA 2008-07 which is proposing a new regulatory environment for light sport aircraft)</p> <p>9. Noted</p>
127 EADS SOCATA	General	EADS SOCATA agrees with NPA 16/2006	Noted
128 CAA-UK	General	<p>CAA has no problem with the overall concept, Agency approves certification programme up front and DOA then certifies certain things without further showing.</p> <p>However, in drafting the amendments EASA has deleted several of the paragraphs giving it powers to undertake investigations and to verify that there are no unsafe conditions. The phrase "No Agency Involvement" is now used in several areas.</p> <p>In extreme circumstances, we are concerned that Organisations could exploit these deletions and the term "No Agency Involvement" to refuse access to necessary data/witnessing by Agency and Authority staff.</p> <p>EASA have also introduced another term "key personnel" in 21A.243 that in our view</p>	<p>Partially Accepted The description of Agency involvement has been modified to address more positively areas where Agency verification will take place (see 21A.38).</p> <p>The concept of key personnel has been withdrawn (See response to Comment #43)</p>

Comment # /provider	Para	Comment/Justification	Response
		could lead to widespread confusion as drafted and may significantly add to the Authority's burden in oversight of DOA approvals.	
129. CAA-UK	Proposal 1, Paragraph 21A.20(d).	<p>21A.20(d) is introduced following the deletion of 21A.33(d) and 21A.257(b) but does not carry the same weight – it is a weaker statement and does not carry the clear message that the Agency reserves the right, at all times, for a greater participation if the Agency sees fit. Guidance material giving more detail on the participation of the Agency in flight and ground tests would address this (see comment on AMC 21A.20(b) paragraph 1).</p> <p>JUSTIFICATION: It is almost impossible at the definition of the compliance programme to identify the areas that might call for greater Agency involvement, particularly in flight testing, and it should be the Agency's right to change its participation if necessary.</p>	Partially Accepted Following comments received, the Agency verification of compliance findings has been redefined, in particular, 21A.257(b) is re-introduced.
130. CAA-UK	Proposal 3, Paragraph 21A.33.	<p>Proposal 3 to delete Paragraph 21A.33 (d) "The applicant shall allow the Agency to review any report... and to determine that no feature or characteristic makes the product unsafe for the uses for which certification is requested."</p> <p>This is an important right of access paragraph for Agency/Authority staff to review any document or witness flight/ground tests and should be retained.</p>	Partially Accepted (See response to Comment #15)
131. CAA-UK	Paragraph 21A.231 (not part of NPA).	<p>It is accepted that this NPA is based on the assumption that the Privileges, afforded under 21A.263, are granted to a DOA that has an "established level of confidence", in respect of any necessary functions for certification. At present there is no generic guidance available for the means to establish such confidence in flight test.</p> <p>Proposed text: 21A.231 Scope This Subpart establishes the procedure for the approval of design organisations and rules governing the rights and obligations of applicants for, and holders of, such approvals. [Not yet fully applicable for Flight Tests].</p> <p>JUSTIFICATION: In the field of flight testing, the required competencies, procedures and safeguards are yet to be published and agreed, other than at national authority levels. Unless Agency staff members (or delegated representatives) are fully familiar with what standards have been established and complied with by an applicant, it is difficult to see how the necessary confidence is obtained. Thus there is difficulty and risk in predicting what aspects may be fully delegated to the applicant. Until flight test processes and safety management are comprehensively defined the proposed amendment should not be adopted in this area.</p>	Not Accepted See new proposals.
132. CAA-UK	Proposal 8, Paragraph 21A.257.	<p>Proposal 8 to delete Paragraph 21A.257 (b) " The design organisation shall allow the Agency to review any report ... to check the validity of compliance statements submitted by the applicant under 21A.239(b)."</p> <p>This is an important right of access paragraph for</p>	Partially Accepted (See response to Comment #112)

Comment # /provider	Para	Comment/Justification	Response
		Agency/Authority staff to review any document or witness flight/ground tests and should be retained.	
133. CAA-UK	Proposal 9, Paragraph 21A.263(b).	<p>Proposal 9 to delete Paragraph 21A.263 (b) "subject to 21A.257(b)" wording and replace with "... perform compliance demonstration activities with no involvement of the Agency".</p> <p>This seems a step beyond the concept of privileges with no further showing but with the Agency/Competent Authority retaining right of investigation prevalent in the rest of Part 21 (such as POA). To be consistent with the rest of the Regulation, the phrasing "normally" and with "no further showing" could be used.</p> <p>The current wording "no involvement" implies that the Agency has no power at all to investigate in any circumstances, perhaps "not directly involved" would be more appropriate.</p>	Partially Accepted (See response to Comment #113)
134. CAA-UK	Proposal 12, Paragraph AMC 21A.20(b), 1	<p>Guidance material giving more detail on the participation of the Agency in flight and ground tests would be appropriate.</p> <p>Insert a new paragraph 1.1.4 to read: "- a statement that recognises that the Agency reserves the right to conduct any investigations and participate in or perform any ground or flight tests if concerns arise with any aspect of the certification programme that otherwise cannot be resolved."</p> <p>JUSTIFICATION: In lieu of the clear statements in deleted paragraphs of 21A.33(d) and 21A.257(b), the guidance material should make it clear that the Agency reserves the right to change its participation if it is found necessary.</p>	Partially Accepted (See response to Comment #129)
135. CAA-UK	Proposal 12, Paragraph AMC 21A.20(b), 1.1.2.	<p>The approved certification programme should also specifically recognise that flight testing by the Agency's test pilot and flight test engineer:</p> <ul style="list-style-type: none"> • brings a wider perspective (through knowledge of other applicants' products) that benefits standardisation of compliance showing, • provides confidence that interpretations of the requirements are acceptable, and can identify issues at an early stage in the certification programme, permitting resolution without delaying certification. <p>Amend paragraph 1.1.2 to read: "1.1.2 a project schedule including major milestones, in particular an interim flight test review by the Agency's pilot and flight test engineer, if considered necessary by the Agency or the applicant."</p> <p>JUSTIFICATION:</p> <ul style="list-style-type: none"> • Flight testing to show compliance with aircraft handling qualities, performance and system requirements is probably the most subjective aspect of any certification programme and it is vital that industry and authorities are both clear that they are working to a common interpretation of the requirements. • Flight test also has a wider role in the global assessment of the aircraft's fitness for certification 	Not Accepted The level of Agency involvement is defined in new 21A.38 and associated AMC.

Comment # /provider	Para	Comment/Justification	Response
		<p>and can identify issues at an early stage in the certification programme, permitting resolution without delaying certification.</p> <ul style="list-style-type: none"> Furthermore, familiarisation with the product achieved through the certification process is essential to enable the Agency to regulate the continuing airworthiness of the product. <p>In the event that participation by the Agency in the flight testing for the certification programme is severely curtailed, the above concerns can be partly addressed if the concept of a mid-certification flight test review by the Agency test pilot and flight test engineer is accepted.</p>	
136. CAA-UK	Proposal 12, Paragraph AMC 21A.20(b), 1.1.3.	Proposal 12 to introduce new AMC text to 21A.20(b) to describe the Approved Certification programme. Recommend alternative wording to "The Agency will not be involved" in Bullet point 1.1.3 for the reasons described in Proposal 9 above.	Accepted (See response to Comment #128)
137. CAA-UK	Proposals 19 (GM No. 1 to 21A.243(d)) and 20 (GM 21A.247).	<p>Proposal 19 introduces need to identify "key personnel who contribute to level of confidence in establishing privileges under 21A.263(b) in the Handbook, and Proposal 20 makes a change in such key personnel a "Significant Change" i.e. requiring Form 82, investigation by the Agency and amendment to the Final Report.</p> <p>The proposed wording of GM No. 1 to 21A.243(d) 3.3.3 is extremely vague and will lead to confusion and debate with DOA holders. Who are the "key people"? Does this actually mean CVEs (whose competence, by definition, limits the scope of the DOA)? If this is the case, then this is a significant shift with additional administrative burden and signals a return to individual acceptance of staff by an Authority prior to commencing design tasks - in effect the need for a Form 82 will become a latter day form AD458. This is against the concept of the DOA selecting and training their CVEs with sample review of competence by the Agency.</p> <p>This proposal is likely to greatly increase the number of significant changes.</p>	Accepted (See response to Comment #43)
138. CAA-UK	Proposal 21, Paragraph AMC 21A.263(b), 2.	Proposal 21 to introduce new AMC text to 21A.263(b) to describe the DOA privilege for compliance demonstration. Recommend alternative wording to "no Agency involvement" in Bullet point 2 for the reasons described in Proposal 9 above.	Accepted (See response to Comment #116)
139. Transport Canada	Proposal 6 and 7 in total.	<p>It is understood that an applicant for a supplemental type-certificate should comply with the same requirements as the holder of a type-certificate that intends to make the same change. It would seem to be preferable if this is the intent to have Subpart D reflect the full requirements (as is the case) while Subpart E points to and enables the applicable requirements or parts of requirements in Subpart D. This would make it clear that the burden/obligations are the same.</p> <p>This is the approach that appears to have been used in the original text.</p> <p>I would propose that the text of 21A.114 should remain unchanged from what is published as it</p>	Not Accepted The current approach has been found difficult to use, due to the cascade of cross-references.

Comment # /provider	Para	Comment/Justification	Response
		<p>enables 21A.97 as appropriate and contains all required text including the limitation of 21A.97(b). The text of 21A.115 would be appropriate as originally published as the newly added 21A.115(b) is already part of 21A.97(b).</p> <p><u>JUSTIFICATION:</u> This would remove the potential for the text of Subparts D and E to change unintentionally over time and would reinforce the intent that both the original holder of the type-certificate and an applicant for a change to that type-certificate have the same obligations.</p> <p>Transport Canada found this approach to be a strength of Part 21 and recommends that this approach be retained where possible by the drafters of future amendments.</p>	
140. Transport Canada	Proposal 8.	<p>The title of 21A.257 is Investigations whereas the title of 21A.33 is to be revised to read Inspections and Tests versus Investigation and Tests. Should the title of 21A.257 reflect this subtle change as well and read 21A.257 Inspections?</p> <p><u>JUSTIFICATION:</u> The text should be changed to maintain consistency with that of Subpart B in its use in 21A.33 of the term inspection versus investigation. The text of 21A.257 uses investigations twice and both occurrence should be amended to read inspection for consistency with the intended change to 21A.33 and to better reflect the practice that is in fact in use.</p>	<p>Not Accepted Investigation is generally used to indicate that a systematic inquiry is to be undertaken, as in the case of a type-certification programme or DOA application or surveillance.</p> <p>An "inspection" (and "test") is generally considered as part of an "investigation" aimed at determining compliance with a particular requirement. It is therefore inconsistent to refer to "Investigation and Tests".</p> <p>The proposed text follows this convention.</p>
141/142 Odile Turret	Part V "Regulatory Impact Assessment (Task 1)" Chapter 4 "Impacts" Paragraph a. "All identified impacts" i. "Safety" – option 4	<p>It is not understood how <i>"the approved certification programme will ensure that an appropriate level of agency involvement is determined"</i></p> <p>It is not agreed that <i>"this will enable the agency to focus limited resources..."</i></p> <p><u>JUSTIFICATION:</u> The level of agency involvement is not only linked to the capability and experience of the applicant but depends on several criteria :</p> <ul style="list-style-type: none"> - The A/C design novelty and systems complexity - Determination and application of new requirements/special conditions/specific regulatory material - Experience gained on other similar projects - Experience and knowledge of EASA team specialists - Significant issues that may arise during the project (difficult to anticipate) - <p>It is agreed that the applicant when he has finalized the design choices is able to identify and propose in its certification programme areas of investigation for the agency and the type of documents that need to be approved (Cert plans, FHA, test programs...) and it is already done like that but the applicant is not able to predetermine precisely the number of meetings, number of flight hours, number of Software audits that will be necessary over the 5 or 7 years of a project</p>	<p>Partially Accepted See general explanations, in V above.</p>

Comment # /provider	Para	Comment/Justification	Response
		<p>This is not a problem today because during this time, the authority constantly adapt to the needs of the program: SW audits planned on a system can be delegated after the first one because satisfaction and confidence were achieved and at contrary, investigation can be increased if design is more complex than planned, issues appear or problems on a similar design are found on an other project (we have several examples that I cannot develop publicly).</p> <p>This would work as far as this NPA does not restrict the ability of the agency to adapt their involvement to the needs of the project.</p> <p>It is suggested to point out that any increase in authority involvement should be explained and justified to the applicant and I am confident that EASA management is able to solve any conflict that may occur in this matter.</p>	
143. Odile Turret	Part V "Regulatory Impact Assessment (Task 1)" Chapter 4 "Impacts" Paragraph b. "Equity and fairness ..." – option 4	<p>-It is not agreed that the level of agency involvement should be based on the established ability and experience of the applicant</p> <p>-It is not agreed that the limited resources of the agency is a valid justification.</p> <p><u>JUSTIFICATION:</u> As explained in my previous comments, the ability and experience of the applicant is not the only criteria that should be considered.</p> <p>The main task of the agency is to maintain a high level of safety in civil aviation and the resources put in place should be adequate to achieve this goal. It is the agency responsibility to obtain the needed budget and resources and it is "strange" to state that the agency promote restriction in technical investigation because of <i>their "limited resources"</i></p> <p>The agency should find means to optimize the use of existing resources in Europe.</p>	Partially Accepted See general explanations in IV above.
144. Odile Turret	Part V "Regulatory Impact Assessment (Task 1)" Chapter 5 "Summary and final assessment" Paragraph c. "final assessment and recommendation of a preferred option"	<p>- The acceptance by the agency of already existing DOA privileges does not need to be clarified as the agency has published Part 21. The aim of option 4 is clearly to enhance the existing DOA privileges by reducing the agency privileges.</p> <p>-It is not agreed that option 4 will enhance standardization.</p> <p><u>JUSTIFICATION:</u> The paragraph seems to suggest that agency practices need to be standardized which is a good intent; harmonization and standardization in Agency practices is a matter of management procedures and quality process. This is not the role of the applicant. It should be noted that this concern was in the past more critical with separate National authorities and it was covered by Certification Standardization Panels (CSP)</p> <p>On the applicants' side, my experience shows that the industry practices are not necessarily harmonized and Authority involvement can help in this matter.</p> <p>When unexpected conditions arise during a certification programme, it is usually very late in the programme and it may be difficult to appoint new specialists with no knowledge in this programme</p>	Noted See general explanations in IV above.

Comment # /provider	Para	Comment/Justification	Response
		(especially if complex) if the team has been underestimated.	
145. Odile Tourret	Part B and draft opinion Part 21	<p>Generally, It is not agreed that the level of involvement of the agency should be restricted to the applicant will It is recommended to reconsider the use of option 4 and to not issue this NPA as proposed</p> <p><u>JUSTIFICATION:</u> It is agreed that the level of involvement of the agency can be proposed by the applicant in the certification programme as it is already done by some manufacturers and this should be discussed and negotiated. The recent A 380 experience shows that the Authority should be authorized to review, inspect and perform tests as deemed necessary. A significant number of system anomalies were found through the agency team investigation (testing...)</p> <p>It is recognized that the less the agency will investigate, the less anomalies they will find! But is it the target goal?</p> <p>We all agree that the safety level is primarily based on the manufacturer expertise and design processes but I believe that the independent technical investigation performed by the authorities has a significant beneficial impact on the safety level and represents the last safety net. Changing well proven certification practices at a stage where the agency is still in a transition period without compensatory factors would certainly put the safety level at risk. The agency should take time to study solutions to optimize their practices.</p> <p>The agency has recruited high level and experienced specialist to perform certification tasks, those people are perfectly able to perform reasonable investigation based on their knowledge and experience. Again, the required standardization should be achieved through management procedures and quality process.</p>	Partially Accepted See general explanations in IV above and new 21A.38.
146 Christophe Sergent	AMC 21A.20 (b)	<ul style="list-style-type: none"> • How does EASA Office approve the certification programme ? Does the EASA Office plan to use a specific EASA Form ? • Is the agency's approval of the certification programme is systematic ? 	Noted Under the revised concept the Agency will not approve the CP. Agency internal procedures will describe how the CP is reviewed and disagreements notified to the applicant.
147. ECOGAS	General	We strongly support option four where the DOA has approval granted on the basis of experience. Clearly we take that stance because of our extensive BCAR experience and a well established relationship with the CAA. Providing that the local NAA is going to be consulted then this seems the best option. If the decision is only going to be based on the short EASA relationship then we would be concerned.	Noted
148. FAA	Page 17 of 37 NPA No 16-2006, 21A.433 Repair	"(a) The applicant for approval of a repair design shall: 1. Show compliance with the certification specifications and environmental protection requirements incorporated by reference in the type-	Not Accepted This is outside the scope of this NPA. Acceptance of FAA approvals will be regulated in the new agreement between US and EU,

Comment # /provider	Para	Comment/Justification	Response
	design, (a)	<p>certificate or supplemental type-certificate, as applicable, or those in effect on the date of application (for repair design approval), plus any ...".</p> <p>(An assumption could be made that FAA 337 field approvals previously incorporated on individual aircraft for FAA approval of repairs or alterations would not be allowed EASA approval unless there is compliance shown with the appropriate airworthiness standards.)</p> <p>JUSTIFICATION: FAA field approvals in the past may not have referenced specific certification specifications or requirements, nor were they required to. The FAA 337 form did require the listing or reference of approving data in a separate block and signature approval of the FAA inspector.</p>	in particular in its Technical Implementation Procedures (TIP).
149. FAA	Page 24 of 37 NPA No 16-2006, AMC 21A.114, paragraph 2.	<p>"2. For major changes approved under a supplemental type-certificate and not requiring long and complex compliance demonstration activities, a proposed certification programme, as described in AMC 21A.20 paragraph 1, can be submitted with the application in a simplified format. The certification programme should contain at least the following elements:</p> <p>...</p> <p>- As appropriate, the involvement of the type-certificate holder of the product on which the STC is proposed (see 21A.113 and 115)."</p> <p>(The FAA does not have the "association with an OEM" requirement. Hopefully this proposal will not affect EASA acceptance of FAA STC as provided in Bilateral Aviation Safety Agreement)</p> <p>JUSTIFICATION: (This comment recognizes a difference in FAA certification plan and EASA certification programme requirements)</p>	Noted Acceptance of FAA approvals will be regulated in the new agreement between US and EU, in particular in its Technical Implementation Procedures (TIP).
150. FAA	General	<p>It would be very beneficial to the reader if you include a "Terminology" or "Definitions" page at the beginning of the document containing basic definition for Certification Specifications, Acceptable Means of Compliance, Guidance Material, Complex Compliance Demonstration, and Design Organization Approval (DOA).</p> <p>JUSTIFICATION: Many organizations may not interpret the terms the same or have unique definitions for the terms. For example, for the FAA the term DOA specifies Delegation Option Authorization.</p>	Noted Some definitions are already available on the Agency webpage dealing with Organisation Approvals.
151. FAA	Page 13 of 37 NPA No 16-2006, Paragraph 21A.20 Compliance with the type certification basis and environmental protection	<p>"(b) The applicant shall propose a certification programme, which the Agency shall approve, detailing: ..."</p> <p>Suggestion: Add another item to the list for "the applicable certification specifications." Was this important requirement left out inadvertently or is this intended?</p> <p>JUSTIFICATION: The proposed certification specifications as well as the</p>	Noted (See response to Comment #103)

Comment # /provider	Para	Comment/Justification	Response
	requirements, (b)	means of compliance should be listed in the certification programme for the Agency and applicant mutual understanding and agreement.	
152. FAA	Page 14 of 37 NPA 16-2006, Paragraph 21A.33, Inspections and test, (a)	<p>“(a) The applicant shall perform all inspections and tests, where identified as means of compliance.”</p> <p>Suggestion: Please return to the original text, “The applicant shall perform all inspections and test necessary to show compliance with the applicable type certification basis and environmental protection requirements”.</p> <p><u>JUSTIFICATION:</u> The proposed modified text weakens the intent of the rule. The applicant should perform all inspections and tests based on the certification specifications as contained in the type certification basis. Requiring inspections or tests only when identified as the means of compliance severs the link with the certification basis, and weakens the requirement to an arbitrary decision process.</p>	Accepted (See also Comment #107)
153. FAA	Page 15 of 37 NPA 16-2006, Paragraph 21A.97 Major changes, (a)	<p>“(a) An applicant for approval of a major change shall: ...”</p> <p><u>JUSTIFICATION:</u> There should be an explanation or clarification for removing long standing requirements such as substantiating data submittals for the Agency to review.</p>	Not Accepted (See response to Comment #110)
154. FAA	Page 21 of 37 NPA 16-2006, Paragraph AMC 21A.20(b), 1 Initiation	<p>“1 Initiation 1.1 For particular project and as part of the technical familiarization, the applicant should propose a certification program...”</p> <p>Suggestion: The word “should” should be substituted with “must” or “shall” in order to be consistent with the proposed rule language.</p> <p><u>JUSTIFICATION:</u> Consistency with the proposed rule language is necessary for proper understanding and application of the rule.</p>	Partially Accepted Text is amended to substitute “provides” for “should propose”.
155. FAA	Page 24 of 37 NPA 16-2006, GM 21A.20(d) Changed Agency involvement	The grammar does not match the topic title. Suggest the title be rewritten to read “Change in Agency Involvement”, because this is what is being described in the proposed GM 21A.20(d). The topic is not about a “Changed” Agency, but actually a change in agency involvement.	Noted (See response to Comment #17)
156. FAA	Page 25 of 37 NPA 16-2006, AMC 21A.114, Compliance demonstration process for Supplemental Type-Certificate, Paragraph 2.	<p>“2. For major changes approved under a supplemental type-certificate and not requiring long and complex compliance demonstration activities...”</p> <p>Question: What is meant by “complex compliance demonstration activities...”? </p> <p>Suggestion: Need to introduce this definition or distinction between complex and non-complex compliance demonstration for clarification.</p> <p><u>JUSTIFICATION:</u> Clarification of terms promotes understanding and proper application of rules.</p>	Not Accepted The rest of the text clarifies in which circumstances the simplified approach can be used.

Comment # /provider	Para	Comment/Justification	Response
157. FAA	Page 27 of 37 NPA 16-2006, Figure 1 – Relationships Between Design, Design Assurance and Type Investigation	Suggestion: Replace the last two words of the figure title from "Type Investigation" to "Certification Programme" in order to be consistent with the Proposal 18 on Page 36 of 37, GM No.1 to 21A.239(a) Design assurance system text. <u>JUSTIFICATION:</u> Consistency of terms for fuller understanding.	Not Accepted (See response to Comment #4)
158. FAA	Page 31 of 37 NPA 16-2006, GM 21A.263(c)(4) Paragraph 3.3 Clarification, second sentence.	"All decisions of classification of minor revisions to the FM that are not straightforward..." Question: What would be an example of a minor revision to a Flight Manual that was not straightforward? Suggestion: Please clarify or list examples of what anticipated situation is being addressed here. <u>JUSTIFICATION:</u> Without clear concise language, the applicant (DOA) could classify everything as straight forward.	Noted Not straightforward would mean not directly related to the lists provided in paragraph 2.

Appendix 1: Revised text of NPA 16-2006

New text relative to published Part-21 and AMC/GM is identified by grey shading
 Deleted text relative to published Part-21 and AMC/GM is shown by strikethrough
 Text in red shows revised text relative to NPA 16-2006

NPA Text	Proposed Final Text	Justification
<p>21A.20 Compliance with the type-certification basis and environmental protection requirements</p> <p>(a) The applicant for a type-certificate or a restricted type-certificate shall show compliance with the applicable type-certification basis and environmental protection requirements, and shall provide to the Agency the means by which such compliance has been shown.</p> <p>(b) The applicant shall propose a certification programme, which the Agency shall approve, detailing:</p> <ol style="list-style-type: none"> 1. the means of compliance; and 2. the compliance documentation structure; and 3. the involvement of the Agency in the compliance demonstration activities, taking into account the DOA privileges granted under 21A.263(b), if applicable. <p>(c) The applicant shall record justification of compliance within compliance documents as per the approved certification programme prescribed in paragraph (b).</p> <p>(d) Where conditions arise that may cause a departure from the approved certification programme established in paragraph (b), the applicant shall provide whatever</p>	<p>21A.20 Compliance with the type-certification basis and environmental protection requirements</p> <p>(a) The applicant for a type-certificate or a restricted type-certificate shall show show demonstrate compliance with the applicable type-certification basis and environmental protection requirements. and shall provide to the Agency the means by which such compliance has been shown.</p> <p>(b) The applicant shall propose a certification programme, which the Agency shall approve, detailing:</p> <ol style="list-style-type: none"> 1. the means of compliance; and 2. the compliance documentation structure; and 3. the involvement of the Agency in the compliance demonstration activities, taking into account the DOA privileges granted under 21A.263(b), if applicable. <p>(b) The applicant shall provide the Agency with a certification programme detailing the means for compliance demonstration; this document shall be updated as necessary during the certification process.</p> <p>(c) The applicant shall record justification of compliance within compliance documents as per the approved as per the approved according to the certification programme prescribed in prescribed in established under sub-paragraph (b).</p> <p>(d) Where conditions arise that may cause a departure from the approved certification programme established in paragraph (b), the applicant shall provide whatever</p>	<p>- For consistency "show" is replaced by "demonstrate" throughout.</p> <p>- "Approval" of the CP is no longer required and is removed throughout. (See Comment #5)</p> <p>-To clarify responsibilities, the link between the CP and Agency involvement in compliance verification is removed. Agency verification is notified separately under 21A.38.</p> <p>- Editorial change</p> <p>- Deleted. Changes are now addressed in new paragraph 21A.38.</p>

NPA Text	Proposed Final Text	Justification
<p>additional information is requested and allow, where necessary, changed Agency involvement in the compliance demonstration activities. The certification programme shall be updated accordingly and approved by the Agency.</p> <p>(e) The applicant shall declare that it has shown compliance with the applicable type-certification basis and environmental protection requirements, according to the approved certification programme established under paragraph (b).</p> <p>(c) Where the applicant holds an appropriate design organisation approval, the declaration of paragraph (b) shall be made according to the provisions of Subpart J.</p>	<p>additional information is requested and allow, where necessary, changed Agency involvement in the compliance demonstration activities. The certification programme shall be updated accordingly and approved by the Agency.</p> <p>(ed) The applicant shall declare that it has shown demonstrated compliance with the applicable type-certification basis and environmental protection requirements, according to the certification programme established under sub-paragraph (b).</p> <p>(c) Where the applicant holds an appropriate design organisation approval, the declaration of paragraph (b) shall be made according to the provisions of Subpart J.</p>	<p>- Editorial change.</p>
<p>21A.21 Issue of a type-certificate</p> <p>The applicant shall be entitled to have a product type-certificate issued by the Agency after:</p> <p>(a) ...</p> <p>(b) submitting the declaration referred to in 21A.20(he); and</p> <p>(c) ...</p>	<p>21A.21 Issue of a type-certificate</p> <p>The applicant shall be entitled to have a product type-certificate issued by the Agency after:</p> <p>(a) ...</p> <p>(b) submitting the declaration referred to in 21A.20(hed); and</p> <p>(c) ...</p>	<p>- Editorial change.</p>
<p>21A.33 InspectionsInvestigation and tests</p> <p>(a) The applicant shall perform all inspections and tests necessary to show compliance with the applicable type-certification basis and environmental protection requirements, where identified as means of compliance.</p> <p>(b) ...</p> <p>(c) The applicant shall allow the Agency to make any inspections necessary to check compliance with paragraph (b), as established in 21A.20(b).</p> <p>(d) The applicant shall allow the Agency to review any report</p>	<p>21A.33 InspectionsInvestigation and tTests</p> <p>(a) The applicant shall perform all inspections and tests necessary to show demonstrate compliance with the applicable type-certification basis and environmental protection requirements, where identified as means of compliance.</p> <p>(b) ...</p> <p>(c) The applicant shall allow the Agency to make any inspections necessary to check compliance with paragraph (b), as established in 21A.20(b).</p> <p>(d) The applicant shall allow the Agency to review any report</p>	<p>- Original text re-instated with editorial change. (See comment #107)</p> <p>- Agency verification of compliance findings is now addressed in 21A.38.</p>

NPA Text	Proposed Final Text	Justification
<p>and make any inspection and to perform or witness any flight and ground test necessary to check the validity of the declaration of compliance submitted by the applicant under 21A.20(b) and to determine that no feature or characteristic makes the product unsafe for the uses for which certification is requested.</p> <p>(de) For tests performed or witnessed by the Agency under paragraph (d):</p> <ol style="list-style-type: none"> 1. The applicant shall submit to the Agency a statement of compliance with paragraph (b); and 2. No change relating to the test that would affect the statement of compliance may be made to a product, part or appliance between the time compliance with paragraph (b) is shown and the time it is presented to the Agency for test. 	<p>and make any inspection and to perform or witness any flight and ground test necessary to check the validity of the declaration of compliance submitted by the applicant under 21A.20(b) and to determine that no feature or characteristic makes the product unsafe for the uses for which certification is requested.</p> <p>(ce) For tests performed or witnessed by the Agency under paragraph (d):</p> <ol style="list-style-type: none"> (1) The applicant shall submit to the Agency a statement of compliance with paragraph (b); and (2) No change relating to the test that would affect the statement of compliance may be made to a product, part or appliance between the time compliance with paragraph (b) is shown demonstrated and the time it is presented to the Agency for test. 	<p>- Editorial change.</p> <p>- Editorial change.</p>
	<p>21A.38 Verification by the Agency</p> <p>(a) The Agency shall verify the applicant's compliance demonstration when the applicant does not hold a Design Organisation Approval or when the compliance demonstration is outside the privileges of the Design Organisation Approval.</p> <p>(b) The Agency shall verify the compliance demonstration of an applicant when it can substantiate, using well established risk assessment methodologies, that such compliance demonstration may contain serious shortcomings. This risk assessment must be based on the following evidence:</p> <ol style="list-style-type: none"> 1. Absence of past experience of compliance demonstration; or 2. Departure from means of compliance recommended in the certification specification; or 3. Finding(s) of non-compliance made during a 	<p>- New paragraph defining an obligation on the Agency to verify compliance demonstration in defined circumstances.</p>

NPA Text	Proposed Final Text	Justification
	<p style="color: red;">verification of related compliance demonstrations on other products having similar design features; or</p> <p style="color: red;">4. Finding(s) made during an investigation of the applicant’s design organisation; or</p> <p style="color: red;">5. Documented adverse trend in safety or environmental protection resulting from review of in-service experience on other products having similar design features; or</p> <p style="color: red;">6. Impacts on safety or environmental protection resulting from changes to the operational environment of the product under certification</p> <p style="color: red;">The Agency shall, without undue delay, notify the applicant of the Agency’s expected level of verification.</p> <p style="color: red;">(c) If conditions arise that may cause a departure from (b), the Agency shall, without undue delay, notify the applicant of its changed level of verification.</p>	
<p>21A.97 Major changes</p> <p>(a) An applicant for approval of a major change shall:</p> <ol style="list-style-type: none"> 1. Submit to the Agency substantiating data together with any necessary descriptive data for inclusion in the type design; 12. Show that the changed product complies with applicable certification specifications and environmental protection requirements, as specified in 21A.101; and 23. Demonstrate Declare that it has shown compliance with the applicable certification specifications and environmental protection requirements in accordance with 21A.20(b), (c), (d) and (e); and shall provide to the Agency the basis on which such 	<p>21A.97 Major changes</p> <p>(a) An applicant for approval of a major change shall:</p> <ol style="list-style-type: none"> 1. Submit to the Agency substantiating data together with any necessary descriptive data for inclusion in the type design; 12. Show Demonstrate that the changed product complies with applicable certification specifications and environmental protection requirements, as specified in 21A.101; and 23. Demonstrate Declare that it has shown compliance with the applicable certification specifications and environmental protection requirements in accordance with 21A.20(b), (c); and (d) and (e); and shall provide to the Agency the basis on 	<p>- Editorial change.</p> <p>- (e) is no longer valid and is deleted.</p>

NPA Text	Proposed Final Text	Justification
<p>a declaration is made; and</p> <p>4. Where the applicant holds an appropriate design organisation approval, make the declaration of subparagraph (a)(3) according to the provisions of Subpart J;</p> <p>35. Comply with 21A.33 and, where applicable, 21A.35.</p> <p>(b) Approval of a major change in a type design is limited to that or those specific configuration(s) in the type design upon which the change is made.</p>	<p>which such a declaration is made; and</p> <p>4. Where the applicant holds an appropriate design organisation approval, make the declaration of subparagraph (a)(3) according to the provisions of Subpart J;</p> <p>35. Comply with 21A.33 and, where applicable, 21A.35.</p> <p>(b) The Agency shall verify the applicant's compliance demonstration in accordance with 21A.38.</p> <p>(b) Approval of a major change in a type design is limited to that or those specific configuration(s) in the type design upon which the change is made.</p>	<p>- (b) added to provide the link with 21A.38.</p>
<p>21A.103 Issue of approval</p> <p>(a) The applicant shall be entitled to have a major change to a type design approved by the Agency after:</p> <ol style="list-style-type: none"> 1. submitting the declaration referred to in 21A.20(e)97(a)(3); and 2. 	<p>21A.103 Issue of approval</p> <p>(a) The applicant shall be entitled to have a major change to a type design approved by the Agency after:</p> <ol style="list-style-type: none"> 1. submitting the declaration referred to in 21A.20(ed)97(a)(3); and 2. 	<p>- Editorial change.</p>
<p>21A.114 Compliance with the certification specifications and environmental protection requirementsShowing of compliance</p> <p>(a) TheAny applicant for a supplemental type-certificate shall comply with 21A.97.show that the changed product complies with applicable certification specifications and environmental protection requirements, as specified in 21A.101;</p> <p>(b) The applicant shall demonstrate compliance with the applicable certification specifications and environmental protection requirements in accordance with 21A.20(b),</p>	<p>21A.114 Compliance with the certification specifications and environmental protection requirementsShowing of compliance</p> <p>(a) TheAny applicant for a supplemental type-certificate shall comply with 21A.97. showdemonstrate that the changed product complies with applicable certification specifications and environmental protection requirements, as specified in 21A.101;</p> <p>(b) The applicant shall demonstrate compliance with the applicable certification specifications and environmental protection requirements in accordance with 21A.20(b),</p>	<p>- Editorial change.</p> <p>- Editorial change.</p>

NPA Text	Proposed Final Text	Justification
<p>(c), (d) and (e);</p> <p>(c) The applicant shall comply with 21A.33 and, where applicable, 21A.35.</p>	<p>(c); and (d) and (e);</p> <p>(c) The applicant shall comply with 21A.33 and, where applicable, 21A.35.</p> <p>(d) The Agency shall verify the applicant's compliance demonstration in accordance with 21A.38.</p>	<p>- (d) added to provide the link with 21A.38.</p>
<p>21A.115 Issue of a supplemental type-certificate</p> <p>(a) The applicant shall be entitled to have a supplemental type-certificate issued by the Agency after:</p> <p>(a) complying with 21A.103(a);</p> <p>1. submitting the declaration referred to in 21A.20(e); and</p> <p>2. It is shown that:</p> <p>(i) the changed product meets the applicable certification specifications and environmental protection requirements, as specified in 21A.101;</p> <p>(ii) any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and</p> <p>(iii) no feature or characteristic makes the product unsafe for the uses for which certification is requested.</p> <p>(3.b) demonstrating its capability in accordance with 21A.112B;</p> <p>(4.e) where, under 21A.113(b), the applicant has entered into an arrangement with the type-certificate holder,</p> <p>(i) 1- The type-certificate holder has advised that its has no technical objection to the information submitted under 21A.93; and</p> <p>(ii) 2- The type-certificate holder has agreed to collaborate with the supplemental type-certificate</p>	<p>21A.115 Issue of a supplemental type-certificate</p> <p>(a) The applicant shall be entitled to have a supplemental type-certificate issued by the Agency after:</p> <p>(a) complying with 21A.103(a);</p> <p>1. submitting the declaration referred to in 21A.20(ed); and</p> <p>2. It is shown-demonstrated that:</p> <p>(i) the changed product meets the applicable certification specifications and environmental protection requirements, as specified in 21A.101;</p> <p>(ii) any airworthiness provisions not complied with are compensated for by factors that provide an equivalent level of safety; and</p> <p>(iii) no feature or characteristic makes the product unsafe for the uses for which certification is requested.</p> <p>(3.b) demonstrating its capability in accordance with 21A.112B;</p> <p>(4.e) where, under 21A.113(b), the applicant has entered into an arrangement with the type-certificate holder,</p> <p>(i) 1- The type-certificate holder has advised that its has no technical objection to the information submitted under 21A.93; and</p> <p>(ii) 2- The type-certificate holder has agreed to collaborate with the supplemental type-certificate</p>	<p>- Editorial changes.</p>

NPA Text	Proposed Final Text	Justification
<p>holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with 21A.44 and 21A.118A.</p> <p>(b) Approval of a supplemental type-certificate is limited in accordance with 21A.97(b).</p>	<p>holder to ensure discharge of all obligations for continued airworthiness of the changed product through compliance with 21A.44 and 21A.118A.</p> <p>(b) Approval of a supplemental type-certificate is limited in accordance with 21A.97(b). to that or those specific configuration(s) of the product upon which the change is made.</p>	<p>- Response to Comment #45</p>
<p>21A.257 Investigations</p> <p>(a) The design organisation shall make arrangements that allow the Agency to make any investigations, including investigations of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart.</p> <p>(b) The design organisation shall allow the Agency to review any report and make any inspection and perform or witness any flight and ground test necessary to check the validity of the compliance statements submitted by the applicant under 21A.239(b).</p>	<p>21A.257 Investigations</p> <p>(a) The design organisation shall make arrangements that allow the Agency to make any investigations, including investigations of partners and subcontractors, necessary to determine compliance and continued compliance with the applicable requirements of this Subpart. This may include reviewing reports, making inspections, and witnessing current tests.</p> <p>(b) The design organisation shall allow the Agency to review any report and make any inspection and perform or witness any flight and ground test necessary to check the validity of the compliance statements submitted by the applicant under 21A.239(b).</p>	<p>- Provides for Agency verification of compliance findings in product related compliance demonstration activities as part of a DOA audit, in order to determine the technical competence and continued competence of that organisation.</p>
<p>21A.263 Privileges</p> <p>(a)</p> <p>(b) Subject to 21A.257(b), compliance documents submitted by the applicant. The holder of a design organisation approval shall be entitled, within its terms of approval and under the conditions defined in the design assurance system, to perform compliance demonstration activities with no involvement of the Agency, in accordance with the approved certification programme established under 21A.20(b), for the purpose of obtaining:</p>	<p>21A.263 Privileges</p> <p>(a)</p> <p>(b) Subject to 21A.257(b), compliance documents submitted by the applicant. Without prejudice to the provisions of 21A.38(b) and (c), the holder of a design organisation approval shall be entitled, within its terms of approval and under the conditions defined in the design assurance system, to perform compliance demonstration activities with no involvement of the Agency, in accordance with the approved certification programme established under 21A.20(b), without Agency verification, for the purpose of obtaining:</p>	<p>- Involvement of the Agency in compliance verification is now defined in 21A.38.</p> <p>- Clarifies that the privilege only relates to compliance demonstration and that the Agency will be involved in</p>

NPA Text	Proposed Final Text	Justification
<p>1. a type-certificate or approval of a major change to a type design; or</p> <p>2. a supplemental type-certificate; or</p> <p>3. an ETSO authorisation under 21A.602(b)(1); or</p> <p>4. a major repair design approval;</p> <p>shall be accepted by the Agency without further verification.</p> <p>(c) The holder of a design organisation approval shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:</p> <ol style="list-style-type: none"> 1. to classify changes to type design and repairs as 'major' or 'minor'. 2. to approve minor changes to type design and minor repairs. 3. to issue information or instructions containing the following statement: 'The technical content of this document is approved under the authority of DOA nr. [EASA]. 21J. [xyz].' 4. to approve documentary changes minor revisions to the aircraft flight manual, and issue such revisionchanges containing the following statement: 'Revision nr. xx to AFM ref. yyy, is aApproved under the authority of DOA nr.[EASA].21J.[xyz].' 5. to approve the design of major repairs to products for which it holds the type-certificate or the supplemental type-certificate. 	<ol style="list-style-type: none"> 1. the approval of flight conditions required for a permit to fly; or 2. a type-certificate or approval of a major change to a type design; or 3. a supplemental type-certificate; or 4. an ETSO authorisation under 21A.602(b)(1); or 5. a major repair design approval; <p>shall be accepted by the Agency without further verification.</p> <p>(c) The holder of a design organisation approval shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:</p> <ol style="list-style-type: none"> 1. to classify changes to type design and repairs as 'major' or 'minor'. 2. to approve minor changes to type design and minor repairs. 3. to issue information or instructions containing the following statement: 'The technical content of this document is approved under the authority of DOA No. [EASA]. 21J. [xyz].' 4. to approve documentary changes minor revisions to the aircraft flight manual, and issue such revisionchanges containing the following statement: 'Revision nr. xx to AFM ref. yyy, is aApproved under the authority of DOA No.[EASA].21J.[xyz].' 5. to approve the design of major repairs to products for which it holds the type-certificate or the supplemental type-certificate. <p>...</p>	<p>other aspects of project certification.</p> <p>- Changes to reflect amendment to Part-21 introduced by EC 375/2007.</p> <p>- See response to comment #3</p> <p>- Editorial change to provide consistent terminology</p>

NPA Text	Proposed Final Text	Justification
<p>21A.433 Repair design</p> <p>(a) The applicant for approval of a repair design shall:</p> <ol style="list-style-type: none"> 1. Show compliance with the type-certification specifications basis and environmental protection requirements incorporated by reference in the type-certificate or supplemental type-certificate, as applicable, or those in effect on the date of application (for repair design approval), plus any amendments to those certification specifications or special conditions the Agency finds necessary to establish a level of safety equal to that established by the type-certification specifications basis incorporated by reference in the type-certificate or supplemental type-certificate. 2. Submit all necessary substantiation data, when requested by the Agency, taking into account the DOA privileges granted under 21A.263(b), if applicable. 3. Declare compliance with the certification specifications and environmental protection requirements of subparagraph (a)(1). <p>(b) ...</p>	<p>21A.433 Repair design</p> <p>(a) The applicant for approval of a repair design shall:</p> <ol style="list-style-type: none"> 1. Show Demonstrate compliance with the type-certification specifications basis and environmental protection requirements incorporated by reference in the type-certificate or supplemental type-certificate, as applicable, or those in effect on the date of application (for repair design approval), plus any amendments to those certification specifications or special conditions the Agency finds necessary to establish a level of safety equal to that established by the type-certification specifications basis incorporated by reference in the type-certificate or supplemental type-certificate. 2. Submit all necessary substantiation data, when requested by the Agency, taking into account the DOA privileges granted under 21A.263(b), if applicable. 3. Declare compliance with the certification specifications and environmental protection requirements of subparagraph (a)(1). <p>(b) ...</p>	<p>- Editorial change.</p>

NPA Text	Proposed Final Text	Justification
<p>AMC 21A.14(b) Alternative Procedures</p> <p>....</p> <p>2 Management of the (supplemental) type certification process</p> <p>2.1 Approved certification programme: See AMC 21A.20(b) for type-certification and AMC 21A.114 for supplemental type-certification. For a particular project, at the beginning of the process, the applicant must propose to the Agency for acceptance a certification programme that includes:</p> <p>Part 1 Procedures for the management of the certification programme: creation and update all along the certification process to integrate the progress of the activities, distribution.</p> <p>This part must also include the milestones of the project development up to the type certification or approval of the major change, with the minimum administrative delays imposed by the Agency when necessary.</p> <p>Part 2 The attribution of responsibilities, as follows:</p> <ul style="list-style-type: none"> — names of the persons having specific responsibilities in the frame of the certification programme — the description of their tasks, responsibilities and associated competences — scope of authority of signatories. 	<p>AMC 21A.14(b) Alternative Procedures</p> <p>....</p> <p>2 Management of the (supplemental) type certification process</p> <p>2.1 Approved Certification programme: See AMC 21A.20(b) for type-certification and AMC 21A.114 for supplemental type-certification. For a particular project, at the beginning of the process, the applicant must propose to the Agency for acceptance a certification programme that includes:</p> <p>Part 1 Procedures for the management of the certification programme: creation and update all along the certification process to integrate the progress of the activities, distribution.</p> <p>This part must also include the milestones of the project development up to the type certification or approval of the major change, with the minimum administrative delays imposed by the Agency when necessary.</p> <p>Part 2 The attribution of responsibilities, as follows:</p> <ul style="list-style-type: none"> — names of the persons having specific responsibilities in the frame of the certification programme — the description of their tasks, responsibilities and associated competences — scope of authority of signatories. 	<p>- Approval of the CP is no longer required and is removed throughout.</p>

NPA Text	Proposed Final Text	Justification
<p>Part 3 The airworthiness requirements applicable to the project, corresponding interpretations, and the equivalence of safety or other specific cases related to the applicable requirements.</p> <p>Part 4 Working methods for showing of compliance and providing to the Agency the means by which such compliance has been shown.</p> <p>This includes all or part of the following, depending on the complexity of the product:</p> <ul style="list-style-type: none"> — the means by which compliance will be shown (means of compliance), in relation with the requirements and/or their detailed interpretation — the technical criteria associated with the means of compliance — milestones specific to particular technical areas in relation with the general planning of the project — the decision process, especially the key points where an Agency decision is needed before further action — the flow of information to the Agency — the configuration control, especially of the test specimen used to show compliance — the organisation of the work for the interfaces or multidisciplinary subjects — those compliance documents that will be subject to verification by the 	<p>Part 3 The airworthiness requirements applicable to the project, corresponding interpretations, and the equivalence of safety or other specific cases related to the applicable requirements.</p> <p>Part 4 Working methods for showing of compliance and providing to the Agency the means by which such compliance has been shown.</p> <p>This includes all or part of the following, depending on the complexity of the product:</p> <ul style="list-style-type: none"> — the means by which compliance will be shown (means of compliance), in relation with the requirements and/or their detailed interpretation — the technical criteria associated with the means of compliance — milestones specific to particular technical areas in relation with the general planning of the project — the decision process, especially the key points where an Agency decision is needed before further action — the flow of information to the Agency — the configuration control, especially of the test specimen used to show compliance — the organisation of the work for the interfaces or multidisciplinary subjects — those compliance documents that will be subject to verification by the 	

NPA Text	Proposed Final Text	Justification
<p style="text-align: center;">Agency</p> <p style="text-align: center;">the establishment of the compliance documentation, including the time schedule and availability to the Agency</p> <p style="text-align: center;">the control of the time schedule, for the accomplishment of the tasks in due time.</p> <p>The applicant must submit all revisions of the certification programme to the Agency for acceptance.</p> <p>2.2 Compliance documentation: see AMC 21A.20(c)The applicant must establish procedures for creating compliance documents in such a way that:</p> <ul style="list-style-type: none"> the kind of document and the technical objectives for each document are determined at the beginning of the process the production of the documents is carefully managed all along the process, in accordance with the milestones defined in the certification programme the various issues of a document are controlled. <p>Each document must contain:</p> <ul style="list-style-type: none"> the reference of the requirements covered by the document data showing compliance and a statement by the applicant declaring compliance with these requirements <p>A numbering system to identify the compliance</p>	<p style="text-align: center;">Agency</p> <p style="text-align: center;">the establishment of the compliance documentation, including the time schedule and availability to the Agency</p> <p style="text-align: center;">the control of the time schedule, for the accomplishment of the tasks in due time.</p> <p>The applicant must submit all revisions of the certification programme to the Agency for acceptance.</p> <p>2.2 Compliance documentation: see AMC 21A.20(c)The applicant must establish procedures for creating compliance documents in such a way that:</p> <ul style="list-style-type: none"> the kind of document and the technical objectives for each document are determined at the beginning of the process the production of the documents is carefully managed all along the process, in accordance with the milestones defined in the certification programme the various issues of a document are controlled. <p>Each document must contain:</p> <ul style="list-style-type: none"> the reference of the requirements covered by the document data showing compliance and a statement by the applicant declaring compliance with these requirements <p>A numbering system to identify the compliance</p>	

NPA Text	Proposed Final Text	Justification
<p>AMC 21A.20(b) Approved certification programme</p> <p>1 Initiation</p> <p>1.1 For a particular project and as part of the technical familiarisation, the applicant should propose a certification programme, that the Agency approves, that includes:</p> <p>1.1.1 a plan containing the following information:</p> <ul style="list-style-type: none"> - Description of the project and the kind of operations envisaged - The proposed certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown, with proposed means of compliance (see appendix for codes). The description of the means of compliance should be sufficient to determine that all necessary data will be collected and compliance can be shown - The compliance documentation structure that provides the framework to organise the relationship between the applicable requirements and the associated compliance document(s). - A compliance checklist addressing each paragraphs of the type-certification basis and environmental protection requirements applicable to the project 	<p>AMC 21A.20(b) Approved-Certification programme</p> <p>1 Initiation</p> <p>1 For a particular project and as part of the technical familiarisation, the applicant should propose provides a certification programme, that the Agency approves, that includes:</p> <p>1.1 a plan containing the following information:</p> <ul style="list-style-type: none"> - Description of the project and the kind of operations envisaged - The proposed certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown demonstrated, with proposed means of compliance (see appendix for codes), and any selected guidance material. The description of the means of compliance should be sufficient to determine that all necessary data will be collected and compliance can be shown demonstrated The compliance documentation structure that provides the framework to organise the relationship between the applicable requirements and the associated compliance document(s). - A compliance checklist addressing each paragraphs of the type-certification basis and environmental protection requirements applicable to the project, with reference to the means of compliance 	<p>- See Comment #154. - No longer required.</p> <p>- Editorial change. - Further detail added.</p> <p>- Editorial change. - Response to comment #5, 4th bullet point.</p> <p>- Response to comment #5,</p>

NPA Text	Proposed Final Text	Justification
<p>- Identification of relevant key staff interfacing with the Agency</p> <p>1.1.2 a project schedule including major milestones;</p> <p>1.1.3 the Agency level of involvement, in particular in the following activities:</p> <ul style="list-style-type: none"> - compliance documentation reviews - participation in inspections, in particular, those related to verification of compliance with 21A.33(b) - participation in audits or design reviews - participation in tests - witnessing tests - conducting tests - assessments or investigations. <p>For each means of compliance, the criteria to be used to identify activities in which the Agency will not be involved, include the following:</p> <ul style="list-style-type: none"> - well known design features - usual means of compliance - accumulated experience related to the kind of project - in-service experience - level of established confidence with the applicant, in particular taking into account the DOA privileges of 21A.263(b), if applicable. <p>1.2 The certification programme can be developed step by step, when the information needed is not available at the beginning of the project.</p> <p>1.3 For a simple project, the certification programme can</p>	<p>and to the related compliance documents.</p> <ul style="list-style-type: none"> - Identification of relevant key staff interfacing with the Agency, unless otherwise identified to the Agency. <p>1.2 a project schedule including major milestones</p> <p>1.1.3 the Agency level of involvement, in particular in the following activities:</p> <ul style="list-style-type: none"> — compliance documentation reviews — participation in inspections, in particular, those related to verification of compliance with 21A.33(b) — participation in audits or design reviews — participation in tests — witnessing tests — conducting tests — assessments or investigations. <p>For each means of compliance, the criteria to be used to identify activities in which the Agency will not be involved, include the following:</p> <ul style="list-style-type: none"> — well known design features — usual means of compliance — accumulated experience related to the kind of project — in-service experience — level of established confidence with the applicant, in particular taking into account the DOA privileges of 21A.263(b), if applicable. <p>2 The certification programme can be developed step by step, when the information needed is not available at the beginning of the project.</p> <p>3 For a simple project, the certification programme can be proposed with the application.</p>	<p>4th bullet point.</p> <ul style="list-style-type: none"> - Response to Comment #39 - Intent moved to AMC 21A.38

NPA Text	Proposed Final Text	Justification
<p>be proposed with the application.</p> <p>1.4 The certification programme can be based on modules that can be updated independently.</p> <p>1.5 The Agency's approval of the certification programme should be formalised and recorded.</p> <p>2 Maintenance and update of the approved certification programme</p> <p>The applicant should keep the certification programme current throughout the project and submit all revised elements to the Agency for approval.</p>	<p>4 The certification programme can be based on modules that can be updated independently.</p> <p>1.5 The Agency's approval of the certification programme should be formalised and recorded.</p> <p>2 Maintenance and update of the approved certification programme</p> <p>GM 21A.20(b) Update to the Certification Programme</p> <p>The applicant should keep the certification programme current throughout the project and submit all revised elements to the Agency for approval.</p>	<p>- CP is not approved by the Agency.</p> <p>- Previous point 2 is now contained in a new GM to split guidance on the initial CP and any future update separately.</p>
<p>AMC 21A.20(c) Compliance documentation</p> <p>1. Compliance documentation comprises of one or more reports, drawings, specifications, calculations, analysis etc and provides a record of the means by which compliance with the applicable type certification basis and environmental protection requirements is shown.</p> <p>2. Each compliance document should normally contain:</p> <ul style="list-style-type: none"> - an adequate link with the corresponding certification plan or with an equivalent document submitted as part of the application for a design approval - the reference of the certification specifications, special conditions or environmental protection requirements addressed by the document - data showing compliance - a statement by the applicant declaring that the document provides the proof of compliance for which it has been created - the appropriate authorised signature. 	<p>AMC 21A.20(c) Compliance documentation</p> <p>1. Compliance documentation comprises of one or more reports, drawings, specifications, calculations, analysis etc and provides a record of the means by which compliance with the applicable type certification basis and environmental protection requirements is shown demonstrated.</p> <p>2. Each compliance document should normally contain:</p> <ul style="list-style-type: none"> - an adequate link with the corresponding certification programme plan or with an equivalent document submitted as part of the application for a design approval - the reference of the certification specifications, special conditions or environmental protection requirements addressed by the document - data showing demonstrating compliance - a statement by the applicant declaring that the document provides the proof of compliance for which it has been created - the appropriate authorised signature. 	<p>- Editorial change.</p> <p>- Response to Comment #47.2</p> <p>- Editorial change.</p>

NPA Text	Proposed Final Text	Justification
<p>3. Each compliance document should have a number and issue date. The various issues of a document should be controlled.</p>	<p>3. Each compliance document should have a number and issue date. The various issues of a document should be controlled.</p>	
<p>GM 21A.20(d) Changed Agency involvement</p> <p>1. Conditions that may cause a departure from the approved certification programme include:</p> <ul style="list-style-type: none"> - critical event on similar product or part, requiring safety review - unexpected event during the certification process covered by the approved certification programme (accident, incident, failure, marginal results...) - issues not identified at time of the approved certification programme: <ul style="list-style-type: none"> - new or novel design features - new deviations - new equivalent safety findings - changed means of compliance - changed or new interpretative material - identification of features or characteristics that could make the product unsafe <p>2. Following submission of information, the applicant and the Agency may accept a change in the Agency involvement. In such a case, the relevant elements of the certification programme should be updated and approved by the Agency.</p>	<p>GM 21A.20(d) Changed Agency involvement</p> <p>1. Conditions that may cause a departure from the approved certification programme include:</p> <ul style="list-style-type: none"> - critical event on similar product or part, requiring safety review - unexpected event during the certification process covered by the approved certification programme (accident, incident, failure, marginal results...) - issues not identified at time of the approved certification programme: <ul style="list-style-type: none"> - new or novel design features - new deviations - new equivalent safety findings - changed means of compliance - changed or new interpretative material - identification of features or characteristics that could make the product unsafe <p>2. Following submission of information, the applicant and the Agency may accept a change in the Agency involvement. In such a case, the relevant elements of the certification programme should be updated and approved by the Agency.</p>	<p>- Intent moved to AMC 21A.38</p>
<p>GM 21A.20(e) Final statement</p> <p>Except as otherwise agreed with the Agency, all compliance documents should be produced before issuance of the final statement of compliance required by 21A.20(e).</p>	<p>GM 21A.20(e) Final statement</p> <p>Except as otherwise agreed with the Agency, all compliance documents should be produced before issuance of the final statement of compliance required by 21A.20(e).</p>	<p>- Text is clarified to reflect current practice.</p>

NPA Text	Proposed Final Text	Justification
	<p>All compliance demonstrations should be completed before issuance of the final statement of compliance required by 21A.20(d).</p> <p>If so agreed by the Agency, some compliance documentation may be produced after issuance of the final statement of compliance required by 21A.20(d).</p>	
	<p>GM 21A.33 Investigation Inspections and Tests The requirements of 21A.33(a) should not preclude the applicant requesting the Agency to make flight or other tests of particular aspects of the product during its development and before the type design is fully defined and a Declaration of Compliance can be issued for all the applicable certification specifications (CS). However in case of flight test the applicant should have performed subject tests before the Agency tests and should ensure that no features of the product preclude the safe conduct of the evaluation requested. The Agency may require to repeat any such tests once the type design is fully defined to ensure that subsequent changes have not adversely affected the conclusions from any earlier evaluation. A statement of compliance with sub-paragraph 21A.33(b) is also required for the above tests.</p>	<p>- Editorial change which was missing from the NPA.</p>
	<p>GM 21A.38 Verification by the Agency</p> <p>a. Examples of Agency verification include, but are not limited to:</p> <ul style="list-style-type: none"> (i) Review and acceptance of certain flight test programmes and results (ii) Review and acceptance of certain ground test programmes and results; (iii) Review and acceptance of Functional Hazard Assessments; (iv) Review and acceptance of System Safety 	<p>- New paragraph to support 21A.38.</p>

NPA Text	Proposed Final Text	Justification
	<p>Assessments;</p> <p>(v) Review and acceptance of methods / methodology reports;</p> <p>(vi) Witnessing of important tests (e.g. ultimate load strength tests);</p> <p>(vii) Performance of flight testing (e.g. for those requirements subject to qualitative assessment, or when test results are marginally compliant);</p> <p>(viii) Performance of software/complex electronic hardware audits (based on criticality / complexity / novelty);</p> <p>(ix) Assessment / audit of development assurance processes used to develop complex and critical aircraft/airborne systems;</p> <p>(x) Review and acceptance of compliance data associated with validating authorities' requirements;</p> <p>b. Evidence for risk assessment</p> <p>1. 21A.38(b)(1): Absence of past experience of compliance demonstration, includes:</p> <ul style="list-style-type: none"> - Novel or unusual design features, - Introduction of a new certification specification. - Introduction of new environmental protection requirements <p>2. 21A.38(b)(5): Example of in-service experience - Fuel tank safety.</p> <p>3. 21A.38(b)(6): Example of operational changes - Changes in ATM environment (e.g. RVSM).</p>	
<p>AMC 21A.97 Compliance demonstration process for major changes</p> <p>1. AMC/GM to 21A.20 should be used for a major change.</p>	<p>AMC 21A.97 Compliance demonstration process for major changes</p> <p>1. AMC/GM to 21A.20 should be used for a major change.</p>	<p>- Clarification added</p>

NPA Text	Proposed Final Text	Justification
<p>2. For major changes not requiring long and complex compliance demonstration activities, a proposed certification programme, as described in AMC 21A.20(b) paragraph 1, can be submitted with the application in a simplified format. The proposed certification programme should contain at least the following elements:</p> <ul style="list-style-type: none"> - Purpose of change - Description of change - Applicability - Applicable certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown, with proposed means of compliance (see appendix to AMC 21A.20 for the codes to be used) and compliance documents proposed - If relevant, the delivery schedule of compliance documents and level of Agency involvement. 	<p>2. For major changes not requiring long and complex compliance demonstration activities, a proposed certification programme, as described in AMC 21A.20(b) paragraph 1, can be submitted with the application in a simplified format. The proposed certification programme should contain at least the following elements:</p> <ul style="list-style-type: none"> - Purpose of change - Description of change - Applicability - Applicable certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown demonstrated, with selected proposed means of compliance (see appendix to AMC 21A.20 for the codes to be used) and reference to compliance documents proposed - If relevant, the delivery schedule of compliance documents and level of Agency involvement. 	
<p>AMC 21A.114 Compliance demonstration process for Supplemental Type-Certificate</p> <p>1. AMC/GM to 21A.20 should be used for a supplemental type-certificate.</p> <p>2. For major changes approved under a supplemental type-certificate and not requiring long and complex compliance demonstration activities, a proposed certification programme, as described in AMC 21A.20(b) paragraph 1, can be submitted with the application in a simplified format. The certification programme should contain at least the following elements:</p> <ul style="list-style-type: none"> - Purpose of change - Description of change 	<p>AMC 21A.114 Compliance demonstration process for Supplemental Type-Certificate</p> <p>1. AMC/GM to 21A.20 should be used for a supplemental type-certificate.</p> <p>2. For major changes approved under a supplemental type-certificate and not requiring long and complex compliance demonstration activities, a proposed certification programme, as described in AMC 21A.20(b) paragraph 1, can be submitted with the application in a simplified format. The certification programme should contain at least the following elements:</p> <ul style="list-style-type: none"> - Purpose of change - Description of change 	<p>- Clarification added</p>

NPA Text	Proposed Final Text	Justification
<ul style="list-style-type: none"> - Applicability - Applicable certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown, with proposed means of compliance (see appendix to AMC 21A.20 for the codes to be used) and compliance documents proposed - As appropriate, the involvement of the type-certificate holder of the product on which the STC is proposed (see 21A.113 and 115). - If relevant, the delivery schedule of compliance documents and level of Agency involvement. 	<ul style="list-style-type: none"> - Applicability - Applicable certification specifications, special conditions, equivalent safety findings and environmental protection requirements - The description on how compliance will be shown demonstrated, with selected proposed means of compliance (see appendix to AMC 21A.20 for the codes to be used) and reference to compliance documents proposed - As appropriate, the involvement of the type-certificate holder of the product on which the STC is proposed (see 21A.113 and 115). - If relevant, the delivery schedule of compliance documents and level of Agency involvement. 	

NPA Text	Proposed Final Text	Justification
<p>GM No. 1 to 21A.239(a) Design assurance system</p> <p>....</p> <p>3.1.3 Compliance Verification</p> <p>a. Approval by signing of all compliance documents, including test programmes and data, necessary for the verification of compliance with the applicable CS and environmental protection requirements as defined in Type Investigation the approved certification programme.</p> <p>....</p> <p>3.1.4 Office of Airworthiness</p> <p>....</p> <p>j. Preparation of the Type Investigation certification programme and co-ordination of all tasks related to Type Investigation in concurrence with the Agency.</p> <p>....</p>	<p>GM No. 1 to 21A.239(a) Design assurance system</p> <p>....</p> <p>3.1.3 Compliance Verification</p> <p>a. Approval by signing of all compliance documents, including test programmes and data, necessary for the verification of compliance with the applicable CS and environmental protection requirements as defined in Type Investigation the approved certification programme.</p> <p>....</p> <p>3.1.4 Office of Airworthiness</p> <p>....</p> <p>j. Preparation of the Type Investigation certification programme and co-ordination of all tasks related to Type Investigation in concurrence with the Agency.</p> <p>....</p> <p>i. Ensuring co-operation in preparing inspection and test programmes needed for demonstration of compliance.</p> <p>....</p>	<p>- Approval of the CP is no longer required.</p> <p>- Response to Comment #20</p>
<p>GM No. 1 to 21A.243(d) Statement of qualifications and experience</p> <p>...</p> <p>3.3 Personnel making decisions affecting airworthiness and environmental protection</p> <p>3.3.1. For these personnel, no individual statement is required. The applicant should show to the Agency that there is a system to select, train, maintain and identify them for all tasks where they are necessary.</p> <p>....</p> <p>3.3.2. Except for personnel described in 3.3.3, an individual statement is not required.</p>	<p>GM No. 1 to 21A.243(d) Statement of qualifications and experience</p> <p>...</p> <p>3.3 Personnel making decisions affecting airworthiness and environmental protection</p> <p>3.3.1. For these personnel, no individual statement is required. The applicant should show to the Agency that there is a system to select, train, maintain and identify them for all tasks where they are necessary.</p> <p>....</p> <p>3.3.2. Except for personnel described in 3.3.3, an individual statement is not required.</p>	<p>- Concept is no longer dependent on key personnel. Text reverts back to the original. (See response to Comment #43)</p>

NPA Text	Proposed Final Text	Justification
<p>3.3.3. Where key personnel contribute to the level of confidence used in establishing privileges under 21A.263(b), they should be accordingly identified in the handbook or in a document linked to the handbook.</p>	<p>3.3.3. Where key personnel contribute to the level of confidence used in establishing privileges under 21A.263(b), they should be accordingly identified in the handbook or in a document linked to the handbook.</p>	
<p>GM 21A.247 Significant changes in the design assurance system</p> <p>...</p> <p>2 Responsibilities</p> <p>* Change of the management staff</p> <ul style="list-style-type: none"> - the Head of the design organisation [GM No. 1 to 21A.239(a), para.3.1.2, GM No. 1 to 21A.245, para.4.1, GM 21A.265(b)] - the Chief of the Office of Airworthiness [GM No. 1 to 21A.245, para. 4.2] - the Chief of the independent monitoring function of the design assurance system[21A.239(a)(3) and AMC No. 1 to 21A.243(a), para.2] - key personnel identified in GM No 1 to 21A.243(d), paragraph 3.3.3. <p>* New distribution of responsibilities affecting airworthiness or environmental protection.</p> <p>* For organisations designing minor changes to type design or minor repairs to products, change of the persons identified in GM No. 2 to 21A.243(d).</p>	<p>GM 21A.247 Significant changes in the design assurance system</p> <p>...</p> <p>2 Responsibilities</p> <p>* Change of the management staff</p> <ul style="list-style-type: none"> - the Head of the design organisation [GM No. 1 to 21A.239(a), para.3.1.2, GM No. 1 to 21A.245, para.4.1, GM 21A.265(b)] - the Chief of the Office of Airworthiness [GM No. 1 to 21A.245, para. 4.2] - the Chief of the independent monitoring function of the design assurance system[21A.239(a)(3) and AMC No. 1 to 21A.243(a), para.2] —key personnel identified in GM No 1 to 21A.243(d), paragraph 3.3.3. <p>* New distribution of responsibilities affecting airworthiness or environmental protection.</p> <p>* For organisations designing minor changes to type design or minor repairs to products, change of the persons identified in GM No. 2 to 21A.243(d).</p>	<p>- Response to Comment #43</p>
	<p>GM 21A.263(b) DOA privilege related to compliance demonstration</p> <p>1) The applicant receives the privilege under 21A.263(b) at the time the DOA is granted, with a dependency to later identified Agency verification activities.</p> <p>2) The Agency, in accordance with 21A.38, will notify the applicant, for each certification project, the extent of its expected level of verification.</p>	<p>- GM is added to clarify the link between the DOA privilege and its validity under 21A.38 for each product.</p>

NPA Text	Proposed Final Text	Justification
<p>AMC 21A.263(b) DOA privilege related to compliance demonstration</p> <p>1. The compliance demonstration activities with no Agency involvement should be based on the established level of confidence with the DOA:</p> <ul style="list-style-type: none"> - through the demonstration of capability, in terms of means, procedures, appropriately qualified persons, as recognised in the terms of approval of the design organisation approval; and - satisfactory experience on similar certification exercises. <p>2. The terms of approval may identify areas where confidence in the DOA has been established at a level allowing for no Agency involvement in certification projects. This information should be taken into account when establishing any approved certification programme in accordance with 21A.20(b). The level of confidence established for an individual area may be based upon key personnel only, or organisation performance only, or a combination of both.</p> <p>3. Areas can be, but are not limited to, specific types of compliance demonstration activity, that can be restricted, or not, to a specific technical discipline, or product type.</p> <p>4. The holder should report to the Agency any factor which may affect the established level of confidence referenced in 1 and 2.</p>	<p>AMC 21A.263(b) DOA privilege related to compliance demonstration</p> <p>1. The compliance demonstration activities with no Agency involvement should be based on the established level of confidence with the DOA:</p> <ul style="list-style-type: none"> — through the demonstration of capability, in terms of means, procedures, appropriately qualified persons, as recognised in the terms of approval of the design organisation approval; and — satisfactory experience on similar certification exercises. <p>2. The terms of approval may identify areas where confidence in the DOA has been established at a level allowing for no Agency involvement in certification projects. This information should be taken into account when establishing any approved certification programme in accordance with 21A.20(b). The level of confidence established for an individual area may be based upon key personnel only, or organisation performance only, or a combination of both.</p> <p>3. Areas can be, but are not limited to, specific types of compliance demonstration activity, that can be restricted, or not, to a specific technical discipline, or product type.</p> <p>4. The holder should report to the Agency any factor which may affect the established level of confidence referenced in 1 and 2.</p>	<p>- Deleted as part of changed concept.</p>

NPA Text	Proposed Final Text	Justification
<p>GM 21A.263(c)(4) Procedure for the approval of minor documentary revisionchanges to the aAircraft fFlight mManual</p> <p>1 INTENT</p> <p>This GM provides guidelines to develop a procedure for the approval of minor documentary revisionchanges to the aAircraft fFlight mManual(AFM), hereafter called flight manual (FM).</p> <p>Each DOA applicant/holder should develop its own internal procedure, based on these guidelines, in order to obtain the associated privilege under 21A.263(c)(4).</p> <p>2 MINOR REVISIONS DEFINITION OF DOCUMENTARY CHANGES TO THE AFM</p> <p>2.1 Revisions are changes to the content of the FM that can be presented in various formats, such as:</p> <ul style="list-style-type: none"> - temporary revisions - revisions - supplements - annexes - appendices... <p>2.2 The following revisions to the FM are defined as minor revisions.</p> <p>(a) Revisions to the FM associated with changes to type design classified as minor in accordance with 21A.91.</p> <p>(b) Revision to the FM not associated with changes to type design (also identified as stand-alone revisions), that falls under one of the following:</p> <ul style="list-style-type: none"> - Changes to limitations that are achieved without 	<p>GM 21A.263(c)(4) Procedure for the approval of minor documentary revisionchanges to the Aircraft fFlight mManual</p> <p>1 INTENT</p> <p>This GM provides guidelines to develop a procedure for the approval of minor documentary revisionchanges to the Aircraft fFlight mManual(AFM).</p> <p>Each DOA applicant/holder should develop its own internal procedure, based on these guidelines, in order to obtain the associated privilege under 21A.263(c)(4).</p> <p>2 MINOR REVISIONS DEFINITION OF DOCUMENTARY CHANGES TO THE AFM</p> <p>2.1 Revisions are changes to the content of the FM that can be presented in various formats, such as:</p> <ul style="list-style-type: none"> temporary revisions revisions supplements annexes appendices... <p>2.1 The following revisions to the FM are defined as minor revisions.</p> <p>(a) Revisions to the FM associated with changes to type design classified as minor in accordance with 21A.91.</p> <p>(b) Revision to the FM not associated with changes to type design (also identified as stand-alone revisions), that falls under one of the following:</p> <ul style="list-style-type: none"> - Changes to limitations or procedures that are 	<p>- editorial change</p> <p>- editorial change</p> <p>- Response to Comment #36</p> <p>- Response to Comment #36</p>

NPA Text	Proposed Final Text	Justification
<p>altering or exceeding certification data (e.g. weight, structural, noise, etc.)</p> <ul style="list-style-type: none"> - Consolidation of two or more previously approved and compatible FMs into one, or compilation of different parts taken from previously approved and compatible FMs that are directly applicable to the subject aircraft. - The introduction of compatible and previously approved FM temporary revisions, appendices and supplements. <p>(c) Examples of documentary changes to the AFM that may be approved under the DOA privilege: Documentary revisions to the FM, defined as follows:</p> <p>(1)A - FOR AFM ISSUED BY THE TYPE-CERTIFICATE HOLDER</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM. - Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.) - The addition of compatible and previously EASA approved AFM Temporary changes, appendices or Supplements. - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM where the aircraft configuration, as related to the AFM, is identical to aircraft already in that AFM. 	<p>achieved without altering or exceeding certification data (e.g. weight, structural, noise, etc.)</p> <ul style="list-style-type: none"> - Consolidation of two or more previously approved and compatible FMs into one, or compilation of different parts taken from previously approved and compatible FMs that are directly applicable to the subject aircraft. - The introduction of compatible and previously approved FM amendments, temporary revisions, appendices or supplements. <p>(c) Examples of documentary changes to the AFM that may be approved under the DOA privilege: Administrative Documentaryrevisions to the FM, defined as follows:</p> <p>(1)A - FOR AFM ISSUED BY THE TYPE-CERTIFICATE HOLDER</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM. - Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.) - The addition of compatible and previously EASA approved AFM Temporary changes, appendices or Supplements. - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM where the aircraft configuration, as related to the AFM, is identical to aircraft already in that AFM. 	<p>- Response to Comment #36</p> <p>- Response to Comment #36</p> <p>- Response to Comment #68</p>

NPA Text	Proposed Final Text	Justification
<ul style="list-style-type: none"> - The removal of reference to aircraft serial numbers no longer applicable to that AFM. - The translation of an EASA approved FM into the language of the State of Design or the State of Registration. <p>(2)B - FOR AFM SUPPLEMENTS ISSUED BY STC HOLDERS</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM Ssupplement. <p>Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.)</p> <ul style="list-style-type: none"> - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM Ssupplement in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM Ssupplement where the aircraft configuration, as related to the AFM Ssupplement, is identical to aircraft already in that AFM Ssupplement. <ul style="list-style-type: none"> - The removal of reference to aircraft serial numbers no longer applicable to that AFM Ssupplement. - The translation of an EASA approved FM into the language of the State of Design or the State of Registration. <p>2.3 No other revision can be classified as minor, unless specifically agreed by the Agency.</p>	<ul style="list-style-type: none"> - The removal of reference to aircraft serial numbers no longer applicable to that AFM. - The translation of an EASA approved FM into the language of the State of Design or the State of Registration. <p>(2)B - FOR AFM SUPPLEMENTS ISSUED BY STC HOLDERS</p> <ul style="list-style-type: none"> - Editorial changesrevisions or corrections to the AFM Ssupplement. - Changes to parts of the FM that are not required to be approved by EASA <p>Changes to weight limitations that are within all previously EASA approved limitations (e.g., structural, noise, etc.)</p> <ul style="list-style-type: none"> - Conversions of previously FAA or EASA approved combinations of units of measurement added to the AFM Ssupplement in a previously approved manner. - The addition of aircraft serial numbers to an existing AFM Ssupplement where the aircraft configuration, as related to the AFM Ssupplement, is identical to aircraft already in that AFM Ssupplement. - The addition of a new STC to an existing FM supplement, when this supplement is fully applicable to the new STC - The removal of reference to aircraft serial numbers no longer applicable to that AFM Ssupplement. - The translation of an EASA approved FM into the language of the State of Design or the State of Registration. <p>2.2 No other revision can be classified as minor, unless specifically agreed by the Agency.</p>	<p>- Response to Comment #68</p> <p>- Response to Comment #67</p>

NPA Text	Proposed Final Text	Justification
<p>3 PROCEDURE FOR THE APPROVAL OF MINOR DOCUMENTARY CHANGES REVISIONS TO THE FM</p> <p>3.1 Content</p> <p>The procedure should address the following points:</p> <ul style="list-style-type: none"> - preparation of all AFM changes revisions to the FM, - classification as minor of documentary the AFM change revision to the FM, — verification by the airworthiness function, especially regarding the classification of the AFM change, - approval of the AFM changes revisions to the FM, - approval statement and authorised signatories, — distribution. <p>3.2 Preparation</p> <p>The procedure should indicate how AFM changes revisions to the FM are prepared and how the co-ordination with people in charge of design changes is performed.</p> <p>3.3 Classification</p> <p>The procedure should indicate how AFM changes revisions to the FM are classified as minor documentary changes, in accordance with the criteria of paragraph 2.</p> <p>Changes to the AFM of an editorial nature should be non-technical and should normally only affect existing approved data.</p> <p>All decisions of classification of minor revisions to the FM that are not straightforward must be recorded and documented. These records must be easily accessible to the Agency for sample check.</p> <p>All classifications of minor revisions to FM must be accepted</p>	<p>3 PROCEDURE FOR THE APPROVAL OF MINOR DOCUMENTARY CHANGES REVISIONS TO THE FM</p> <p>3.1 Content</p> <p>The procedure should address the following points:</p> <ul style="list-style-type: none"> - preparation of all AFM changes revisions to the FM, - classification as minor of documentary the AFM change revision to the FM, — verification by the airworthiness function, especially regarding the classification of the AFM change, - approval of the AFM changes revisions to the FM, - approval statement and authorised signatories, — distribution. <p>3.2 Preparation</p> <p>The procedure should indicate how AFM changes revisions to the FM are prepared and how the co-ordination with people in charge of design changes is performed.</p> <p>3.3 Classification</p> <p>The procedure should indicate how AFM changes revisions to the FM are classified as minor documentary changes, in accordance with the criteria of paragraph 2.</p> <p>Changes to the AFM of an editorial nature should be non-technical and should normally only affect existing approved data.</p> <p>All decisions of classification of minor revisions to the FM that are not straightforward must be recorded and documented. These records must be easily accessible to the Agency for sample check.</p> <p>All classifications of minor revisions to FM must be accepted</p>	

NPA Text	Proposed Final Text	Justification
<p>by an appropriate authorised signatory.</p> <p>The procedure must indicate the authorised signatories for the various products listed in the terms of approval.</p> <p>3.4 Verification by Office of airworthiness function</p> <p>The procedure should indicate how people in charge of Office of airworthiness function will :</p> <ul style="list-style-type: none"> — verify the classification as documentary changes — review the content of the AFM changes. <p>3.45 Approval</p> <p>Any change to the AFM should be approved, either by the Agency, or under the privilege of 21A.263(c)(4) for documentary AFM changes.</p> <p>For documentary AFM changes, the procedure should indicate how the approval under the privilege of 21A.263(c)(4) will be formalised.</p> <p>The authorised signatories should be identified (name, signature), together with the scope of authorisation, in a document that can be linked to the DOA handbook.</p> <p>3.56- Approval statement and authorised signatories</p> <p>Revisions of the AFM approved under the privilege of 21A.263(c)(4) containing only documentary changes should be issued with the approval statement defined in 21A.263(c)(4) on the front page and/or in the log of revisions.</p> <p>When approval status is shown on each page, a simplified statement such as "Approved under the authority of DOA nr.[EASA].J.[xyz]" may be used.</p> <p>The authorised signatories should be identified (name, signature), together with the scope of authorisation, in a</p>	<p>by an appropriate authorised signatory.</p> <p>The procedure must indicate the authorised signatories for the various products listed in the terms of approval.</p> <p>3.4 Verification by Office of airworthiness function</p> <p>The procedure should indicate how people in charge of Office of airworthiness function will :</p> <ul style="list-style-type: none"> — verify the classification as documentary changes — review the content of the AFM changes. <p>3.45 Approval</p> <p>Any change to the AFM should be approved, either by the Agency, or under the privilege of 21A.263(c)(4) for documentary AFM changes.</p> <p>For documentary AFM changes, the procedure should indicate how the approval under the privilege of 21A.263(c)(4) will be formalised.</p> <p>The authorised signatories should be identified (name, signature), together with the scope of authorisation, in a document that can be linked to the DOA handbook.</p> <p>3.56- Approval statement and authorised signatories</p> <p>Revisions of the AFM approved under the privilege of 21A.263(c)(4) containing only documentary changes should be issued with the approval statement defined in 21A.263(c)(4) on the front page and/or in the log of revisions.</p> <p>When approval status is shown on each page, a simplified statement such as "Approved under the authority of DOA nr.[EASA].J.[xyz]" may be used.</p> <p>The authorised signatories should be identified (name, signature), together with the scope of authorisation, in a</p>	

NPA Text	Proposed Final Text	Justification
<p>document that can be linked to the DOA handbook.</p> <p>3.7 Maintaining, updating and distribution</p> <p>3.11 The procedure should indicate how the master copy of the AFM is maintained and updated, and how approved revisions are distributed, taking account of 21A.57 or 21A.119.</p>	<p>document that can be linked to the DOA handbook.</p> <p>3.7 Maintaining, updating and distribution</p> <p>3.11 The procedure should indicate how the master copy of the AFM is maintained and updated, and how approved revisions are distributed, taking account of 21A.57 or 21A.119.</p>	
<p>AMC 21A.433 Compliance demonstration process for major repairs</p> <p>The applicant should propose an Agency level of involvement based upon the established level of confidence gained on similar activities under its design organisation approval, in particular, taking into account the privilege of 21A.263(b).</p>	<p>AMC 21A.433 Compliance demonstration process for major repairs</p> <p>The applicant should propose an Agency level of involvement based upon the established level of confidence gained on similar activities under its design organisation approval, in particular, taking into account the privilege of 21A.263(b).</p>	<p>- Response to Comment #123</p>
	<p>AMC 21A.602B(b)(2) Procedures for ETSO authorisations</p> <p>1 Scope</p> <p>1.1 A manual of procedures must set out specific design practices, resources and sequence of activities relevant for the specific projects, taking account of Part 21 requirements.</p> <p>1.2 These procedures must be concise and limited to the information needed for quality and proper control of activities by the applicant/holder, and by the Agency.</p> <p>2 Management of the ETSO authorisation process</p> <p>2.1 For ETSO authorisation, A procedure following the principles of AMC 21A.14(b), paragraph 2.1, 2.2 and 2.3, with the necessary adaptation related to explaining how the application to the Agency and certification process to obtain</p>	<p>- This was missed in the original drafting.</p> <p>- AMC 21A.602B(b)(2) is amended to take into account the changes made to AMC 21A.14(b).</p>

NPA Text	Proposed Final Text	Justification
	<p>an ETSOA will be made, Part 21 Section A Subpart O context must be established.</p> <p>3 Management of design changes</p> <p>3.1 A procedure following the principles of AMC 21A.14(b), paragraphs 3.2 and 3.3, with the necessary adaptation to, taking into account, taking into account 21A.611, must be established for the classification and approval of design changes on articles under ETSO authorisation.</p> <p>3.2 Repairs and production deviations from the approved design data A procedure following the principles of paragraph 3.1 must be established for the classification and approval of repairs and unintentional deviations from the approved design data occurring in production (concessions or non-conformance's) must be established. For repairs, the procedure must be established in accordance with Part 21 Section A Subpart M and associated AMC or GM. For deviations, the procedure must be established in accordance with 21A.610.</p> <p>4 Obligations addressed in 21A.609</p> <p>The applicant should establish the necessary procedures to show to the Agency how it will fulfil the obligations under 21A.609.</p> <p>For issue of information and instructions, a procedure following the principles of AMC 21A.14(b), paragraph 4 must be established.</p> <p>5 Control of design subcontractors</p> <p>The applicant must establish the necessary procedures to show to the Agency how it will control design subcontractors.</p>	